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THE STATES OF SOUTH AMERICA

# .THE STATES OF SOUTH AMERICA 

 THE LAND OF OPPORTUNITYA COMPLETE GEOGRAPHICAL, DESCRIPTIVE, ECONOMIC AND COMMERCIAL SURVEY

## BY

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## WITH ILLUSTRATIONS AND MAPS



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## PREFACE

The reception given to the first edition of this book by the Press and the Public of Great Britain and the United States, combined with the thought that some such compendium of information on so important a financial and commercial field as South America in the present state of the economic world might prove of use, is entirely responsible for this revised edition, to which so much new material has been added that it now bears little resemblance, except in name, to its old original self.

It will now be found to cover, not just a few of the more important Latin-American States as before, but every nation of the Sub-Continent, together with some general chapters on commercial and economic factors of importance, up-to-date statistics, concession laws, and new illustrations and maps, in addition to complete general surveys of these rapidly rising nations, their recent development, and the openings they afford for foreign capital and commerce.

This attempt to give a concise survey-geographical, topographical, agricultural, industrial and com-mercial-of half a Continent with an area of about eight million square miles, a population of sixty millions, and a foreign commerce of over four hundred millions sterling, within the limits of a single volume of even
moderate bulk, has necessitated the exclusion of almost everything but bare facts, and the sacrifice of literary style to brevity of phrase and statistical information. Tabular statistics have, however, been generally avoided as being irksome to read and of little use in a book which is primarily intended for those who are seeking more general information as to the condition, natural features, standard of development, climate, and commercial possibilities of the States of South America.
After the description of each state and its principal cities an epitomized account is given of the economic condition, railways, industries, foreign trade, laws relating to the granting of Government concessions, commercial travellers, and other matters of importance to those who have, or propose to have, an interest financially or commercially in the various countries, and an endeavour made to supply such information as has been suggested by enquiries received at the several Legations and Consulates General in Great Britain, combined with information gathered from South American sources.

Although these countries undoubtedly offer one of the most profitable fields in the world for the introduction of British and foreign manufactures, the investment of capital, and the employment of financial and commercial skill and organization, they cannot truthfully be recommended to the British emigrant who possesses only a very small capital, and is desirous of settling on the land and living by his own labour. This is not because the climate or political conditions of the entire sub-continent are unsuitable, but partly on account of the natural differences of race, language, and customs, and partly in view of the fact that the British emigrant would find himself in competition with Italians, Germans,

Slavs, Spaniards, half-breeds, and coloured labourers, who are content to work not only at a much lower rate of remuneration but also under conditions of environment which he would consider very unsatisfactory.

British manufacturers have, however, a wonderful field open to them in South America. The average annual value of the foreign imports into these countries already reaches 196 millions sterling, and is rising at the phenomenal rate of 30 millions per annum. There are only five serious competitors for the bulk of this colossal trade, viz. the British Empire, the United States, France, Italy and Spain. Germany will take many years to recover her lost prestige, shipping facilities, and to rebuild her disorganized commercial organization in these countries, and go-ahead Japan offers, at present, no very severe competition. Great Britain had, in 1914, over 800 millions sterling invested in these countries, thousands of her most able sons constructing, directing; and supplying the skilled labour, for much of the 55,000 miles of railroad in operation, the public works of over 100 cities, the industries and commerce commensurate with their motherland's investment and foreign trade, and working in harmony with the people themselves, and with the rapidly growing commercial and financial armies of the United States. Still there is the old prestige which made " on the word of an Englishman " a Spanish-American oath of honest dealing, and, behind all, the money and manufacturing power of the greatest Empire in the world.

These nations, comprising over 58 millions of people, have for five years gone short of much that they had been accustomed to enjoy because of the absence of
manufacturing industries at home, and the impossibility of getting all they required from abroad. Consequently they are now ready to absorb vast quantities of foreign merchandise.

It is true, however, that their finances have suffered through their dependance on import and export duties, and their markets have been glutted with raw material which could not be shipped, but periods of slackness and stress matter little to rich agricultural countries, whose recuperative powers are well-known. These states can be relied upon to make great strides forward during the coming years. The opening up of enormous areas by recently constructed railway lines, linking six of the largest states, and connecting so many towns and ports, will not only greatly facilitate the transport of merchandise from the sea-coast to the interior, but will also enable commercial representatives to cover the great distances which often divide the populous centres in a comparatively short space of time.

Financiers should remember that there are states which have not yet received their due mead, and hundreds of promising schemes which have waited five years for a hearing. Merchants would do well to bear in mind that all the larger states have now reached a degree of civilization and advancement which falls but little short of the European standard. For this reason the general run of goods imported should bear comparison, both in price and quality, with those sent, not only from other European countries, but, also, from the United States. Travellers for pleasure or sport might also turn their attention from the beaten tracks, and "discover" the wonderful scenic railways which cross the Andes at an altitude of 12,000 to 15,000 feet,
penetrate dense tropical jungles, and link lakes and ancient temples, with modern cities within a few hours.

The number of good newspapers and journals of all kinds and in several languages, including English, many of which now have a very considerable circulation, offer facilities for profitable advertising on an extensive scale.

In conclusion I should like to take the opportunity of thanking the very large number of Government officials, private individuals, and commercial firms who have so readily aided me in many and diverse ways in regard to both the first and second editions of this work.

CHARLES DOMVILLE-FIFE.

London, 1920.

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## THE REPUBLIC OF ARGENTINA

## GENERAL DESCRIPTION

The Republic of Argentina is situated in the southern extremity of the American continent, and in shape is an elongated triangle the vertex of which is at the meeting point of the two great oceans.

The frontier of Argentina on the north lies contiguous with the three Republics : Brazil, Bolivia, and Paraguay. On the north-east is Uruguay, and on the west the Chilian Republic. The eastern coast-line from the Rio de la Plata to the southern extremity of Tierra del Fuego, an extent of, approximately, 2,600 kilometres ( 1,600 miles), is washed by the Atlantic Ocean.

This huge country, comprising an area of $1,212,000$ square miles, is divided into fourteen Provinces and ten Territories, and has a population of over eight millions.

Argentina was first discovered in 1517, and some twenty years later was annexed to the Crown of Spain; since then its fortunes have been chequered in the extreme ; first a Colony, then a Confederation of States, and now for many years a Republic, thoroughly settled in its administration, and as a nation, happy and prosperous.

The largest portion of Argentina is composed of
immense plains practically destitute of trees, but covered by excellent pastures. In the north, however, there are many well-wooded districts, among which may be mentioned the Territory of the Chaco, which forms the frontier with Paraguay, the eastern portion of Jujuy, Salta, Tucumán, and the province of Santiago del Estero. This forest zone has a very warm climate and differs greatly, both climatically and topographically, from Central Argentina, which is principally composed of the pampas, or vast plains, upon which gigantic herds of cattle and horses are reared. This great pastoral and agricultural region includes the provinces of Santa Fé, Mendoza, San Luis, Buenos Aires, and the Territory of the Pampa.

Patagonia, which is the extreme southern portion of Argentina, is formed by the Territories of the Rio Negro, Chubut, and Santa Cruz. The climate of this region is cool during the short summer, and very cold during the long winter. Strong winds from the Antarctic sweep across the flat marshy pampas, and through the rock-strewn gulleys of the low Cordillera of the Andes, and frost and snow cover the ground for many months in the year.

The most mountainous portion of the state is the north-west, where several parallel ridges of sierras, divided by fertile valleys, traverse the country in a longitudinal direction. Among these mountains the climate is very salubrious, and the region is noted for its great mineral wealth. The Sierras of Córdoba, and the Famatina range in the province of Rioja, are among the most healthy spots in South America.

The hydrographical system of the Republic is very extensive, the whole country being crossed by numerous
rivers, which in many cases have their source among the heights of the Andes or its spurs.

The basin of the Rio de la Plata, which is the widest in the world, forms a considerable portion of the northeastern frontier, and constitutes a magnificent fluvial highway to Buenos Aires, the capital of the Republic. The great tributaries of this important waterway are the rivers Uruguay and Paraná, which have a length of 960 and 2,800 miles respectively.

Over forty rivers of minor importance traverse the state besides the many lakes around Buenos Aires and the canals of Argentine Patagonia.

There are also numerous salt lakes and deposits, of which some particulars may here be given in the words of the Department of Agriculture :
"To conclude this hydrographical sketch of the Republic we may call attention to the existence of a certain number of depressions, occupied by salt lakes and deposits of salt, that constitute so many additional basins into which there flow streams of brackish water, which, on evaporation, deposit the salt they held in solution, forming real natural salt pans, some of them being worked to supply the requirements of the inhabitants of the interior. Amongst these, we may mention the Salina Grande (Great Salt Pan) on the borders of the Provinces of Santiago del Estero and Córdobá, the salt pans of Catamarca, Rioja, and San Juan, the Salinas Grandes situated between Salta and Jujuy, which supply the north of the Republic with salt, and, above all, the salt deposits of Antofalla, Hombre Muerto, Cuarcharí, Arizaro, Rincón, etc., in the high tablelands of Atacama and Jujuy, which are doubly interesting on account of the deposits of borax which they contain."

With the exception of a narrow fringe of land in the extreme north, the whole of Argentina lies within the temperate zone, but the climate varies greatly owing to the hypsometric variations of the surface of the country, which gradually rises from the low flat pampas to the snow-capped summits of the Andes. In the north, the temperature during the summer months is fairly high, but the climate is by no means tropical. Except in the elevated region of Misiones frosts seldom occur. The central region is temperate, but the variations between night and day are often marked. In the city of Buenos Aires it very rarely freezes, but the surrounding country is subject to frost from June to September. In the south, or Argentine Patagonia, the atmosphere is very cold and the prevailing antarctic winds give this desolate region a rigorous climate, and in many parts snow falls in nearly every month in the year.

The Republic of Argentina is composed of fourteen Provinces, ten Territories, and the Federal district of Buenos Aires. The names of these, together with that of their capitals, and the approximate number of other towns of over five thousand inhabitants can be seen below.

A detailed description of the enormous and widely differing tract of country known as the Republic of Argentina would occupy many volumes the size of this one; but a brief sketch of the most important Cities, Provinces, and Territories is necessary to enable a clear understanding of the present and future of this great nation in the making.

The capital of Argentina is Buenos Aires, which is situated on the southern shore of the Rio de la Plata.

This city is the largest in South America and has a population of over $1,700,000$. It is indeed one of the finest cities in the world, being laid out on the American

Number of towns, not including the capital, of 5,000 inhabitants or over.
Buenos Aires - - La Plata - - 30

Entre Rios - - Paraná - - - 12
Santa Fé - - Santa Fé - - 11
Corrientes - - Corrientes - - 10
Córdoba - - Córdoba - - - 8
San Luis - - San Luis - - 2
Mendoza - - - Mendoza - - - 1
San Juan - - - San Juan - - - 1
La Rioja - - - La Rioja - - - 1
Santiago del Estero - Santiago del Estero - 1
Tucumán - - - Tucumán - - - 2
Salta - - - Salta - - - 1
Jujuy - - - Jujuy - - - 1
Catamarca - - Catamarca
territories.

principle, but possessing many fine boulevards which resemble those of Paris.

The main artery of the Federal capital is the Avenida de Mayo, which is certainly a magnificent thoroughfare,
being lined on both sides by trees, shops, and massive five- and six-storey buildings; at night it is illuminated by arc lamps, and the best society of the capital promenades or drives up and down this wide avenue, which is the "Regent Street" or "Broadway" of Buenos Aires.

One of the most important commercial centres is the Callé Florida, which, before the construction of the Avenida de Mayo, was the chief business artery of the city. Here may be seen the busy throng of city men and the wealthy " estancieros" from the interior.
In the north of Buenos Aires are situated the docks and maritime quarter, which present the familiar scene of a busy port, with miles of quays equipped with the latest devices for loading, unloading, and transporting merchandise; railways for the conveyance of goods to and from the interior ; marine workshops ; and dry and floating docks for repairing the many ships which frequent this, the chief port of the Republic.
So much has already been written about the beauty and magnificence of the capital of Argentina that it is both unnecessary and impossible to describe here the many fine avenues, streets, squares and public buildings which compose this thoroughly up-to-date city. It is sufficient to say that he who goes to Buenos Aires expecting to see one of the finest cities in the world, and to enjoy all the comforts, luxuries, and conveniences known to man, will in no way be disappointed. Should he find any grounds for complaint, they will be due to the costliness of luxurious living, the prevailing gaiety, or the excessive number of Italians, who compose the principal portion of the working inhabitants.

The second city of the Republic is Rosario, situated
in the Province of Santa Fé, which has a population of about 218,000 , and possesses streets and buildings equal in every respect to those of the Federal capital. Electric light, tramways, telephones, theatres, clubs, and all that goes to make up a modern metropolis are found in this fine and wealthy city, which is connected by railway with all the populous centres.

The port and city of La Plata, which is the capital of the Province of Buenos Aires, is generally considered to form an important suburb of the Federal district. It has a population of about 100,000 .

The third seaport, in order of commercial importance, is Bahla Blanca, which possesses extensive wharves, graving-docks, and is one of the chief naval harbours of the Republic. The two other most important inland towns are Córdoba with 98,600 inhabitants, and Tucumán with a population of 77,800 .

The other chief seaports of the Republic are: Santa Cruz, Gallegos, San Julian, Comodoro-Rivadavia, Camarones, Puerto-Madryn, San Blas, San Antonio, and Quequen. The fluvial ports are: Concordia, Concepción, and Gualeguaychú, on the river Uruguay, and Campana, San Pedro, San Nicolás, Paraná, Santa Fé, Corrientes, Posadas, and Resistencia, on the Paraná river.

The national Territories, which include by far the largest portion of the Republic, although the most sparsely populated, are situated in the extreme north, west, and south of the country, and are the principal centres for the establishment of immigration colonies and stock-ranches on a very large scale. The Federal Government holds over sixty million hectares ${ }^{1}$ of land

[^0]in these regions, which are among the finest in the world for the raising of horses, cattle, and sheep.

The Territory of Misiones, which is situated in the extreme north-east of the Republic, is noted for its immense, and almost impenetrable, forests, and the large number of rivers and streams which traverse it in all directions. The country is divided into two portions by the Iman Range, which, however, is of no great elevation. The small mountain streams and springs which have their source in these hills, water the fertile valleys and plains of the lowlands. Although the largest portion of this territory is covered by dense jungles there are many broad acres of undulating grass lands upon which cattle and horses can be reared. There are several agricultural colonies, and the collection and preparation of Maté or Paraguayan tea from the bushes which grow wild in the yerbales, form an important industry. The climate is healthy; the maximum temperature in summer being $109^{\circ} \mathrm{F}$., which is greatly tempered by the cool breezes of the evening; the thermometer, even in winter, seldom falls to freezingpoint. The rivers, Upper Paraná, Uruguay, and Iguazú, afford communication with other parts of the Republic, and also with the neighbouring states of Brazil, Uruguay, and Paraguay.

The Territory of the Chaco, which is situated in the north of the country, is composed of one vast plain, parts of which are covered with forests of gigantic trees, eminently suitable for purposes of construction; but the largest portion consists of prairies upon which thousands of horses and cattle could be reared.

Communication between this fertile territory and the commercial centres of the coast is maintained by the
rivers Paraguay, Paraná, and Paraná-mimi. Several small streams flow through the Chaco, giving a means of transport between the various parts of the country.

The Territory of Formosa forms a portion of the Argentine frontier with the Republic of Paraguay. The soil is fertile owing to the dews which moisten the ground at night, but the climate is very hot. The temperature in summer often exceeds $109^{\circ} \mathrm{F}$.

The principal industry of this region is the preparation of Maté, collected in the dense forests which cover a large portion of the country and extend far over the border into Paraguay.

Formosa, being at present somewhat isolated from the centres of civilization, although skirted by the Buenos Aires and Asunción Railway, is but thinly populated ; it is, however, rich in immense forests, and many varieties of tropical fruits and valuable medicinal plants grow luxuriantly.

The Territory of the Pampas, situated in the heart of the Republic, forms part of the great plain of Argentina, which is universally famous for cattle-breeding. It is par excellence a pastoral region, although certain small zones suffer from the severity of the dry season, which, however, does not affect this great and lucrative industry.

The area of this huge territory is approximately fourteen and a half million hectares, of which only one million now remains the property of the Government. This proves beyond question the great success of the breeding industry. Many of the large estancias comprise several thousand hectares, and not a few measure many square leagues. Railway lines are being extended over its entire surface.

The climate is healthy and very suitable for European settlers, although in summer the temperature sometimes rises to between $100^{\circ}$ and $104^{\circ} \mathrm{F}$., and thunderstorms are frequent. The "Pampero," or storm-wind of the South American plains, often sweeps across this region, but the rainfall is comparatively small.

The Territory of Neuquén, in the extreme west of the country, is traversed by the Cordillera of the Andes. The climate is fairly healthy, but the temperature varies considerably. On the western plains it is moderate, but on the heights the thermometer seldom rises above freezing-point.

This territory abounds in grand scenery, as does the whole region of Los Andes. Many and varied are the fine views afforded by the gradual ascent from the sunlit plains over the green-clad foot-hills, up to the peaks of snow. It is connected with the capital by railway.

Agriculture and sheep-farming are largely carried on in this portion of the country, and every year sees a great increase in the number of farms and of hectares brought under cultivation.

The Territory of the Rio Negro forms the southern limit of the vast plains, and is eminently suitable for cattle breeding. The agricultural industry is increasing in favour, notwithstanding the frosts which occur during the winter months.

This region has the great advantage of being connected with the Federal capital by railway, and is crossed by two 'magnificent rivers, the Colorado and Negro, which enable the bordering lands to be easily irrigated, and also offer a cheap means for local transport. The climate is healthy, but cooler than that of the Pampa.

The Territories of Chubut and Santa Cruz, in the
south of the Republic, are but very thinly populated, and the only means of communication with the large commercial centres, other than by the long overland route, is by sea. The country in many parts is wild and rugged, the Andean range forming the "divide" with Chile. Extensive forests cover a large area of the country in the vicinity of the mountains, and several important rivers, such as the Chubut, Santa Cruz, Gallegos, and Deseado cross these Territories. In addition to the small mountain streams there are also several large lakes. The climate is warm in summer, but often very cold in winter.

The staple industries of this southern region are sheep-farming and cattle-breeding, but the climate is decidedly more suitable for the former.

The extreme south of the Republic is formed by the Territory of Tierra del Fuego, or Antarctic Argentina, which is divided from the mainland by the Straits of Magellan. This wild and broken country is swept by the breezes which come across the ocean from the ice-fields which surround the South Pole. For many months in the year the whole Territory is covered by deep snow, the rivers blocked by ice, and the Cordillera of the Andes, which here terminates in a confused mass of low mountains, is almost impassable.

Sheep-farming is, at present, the principal industry of this great, lonely region, but beneath the rugged surface of the mountains, and in the rivers, gold has been found in large quantities. Hardy prospectors, suitably equipped, might here find veins and washings as rich as in Alaska-the northern extremity of the American Continent.

The Territories of the Republic are the vast regions
away from the coast where land is cheap, and the virgin soil makes agriculture, or stock-breeding, remunerative industries. In the provinces which surround Buenos Aires the soil is just as fertile, but the land is nearly all occupied, and consequently a much higher price must be paid for it. Large concessions of land cannot be obtained from the Government except in the Territories or distant provinces.

Argentina was, for many years, favoured with an enormous influx of immigrants of all nationalities. The annual number of arrivals, under this heading, previous to 1914, averaged over a quarter of a million, half of whom were Italians, and the remainder mostly of Spanish, French, German, or English extraction. ${ }^{1}$

The Immigration Service of the Republic was well organized, and the newcomers were given free board and lodgings in the "Immigrants' hotel," employment was procured for them and all travelling expenses to their ultimate destination were paid by the state.

## the constitution

The political organization of the Republic of Argentina is almost identical with that of the United States, the exception being that the power is more centralized. The Federal Government, which is composed of the Executive, headed by the President and eight Secretaries of State, the Senate, and the House of Representatives, has the sole power of enacting laws relating to the wellbeing of the whole nation, such as those relating to national defence, mining, civil and penal laws.

[^1]The Civil Service of the Republic is very efficient, having received much attention during recent years. There are some 6,000 post offices situated all over the country, and the transmission of letters, considering the enormous and sparsely populated areas to be served, is carried out with rapidity, the means adopted being by railway or steamer to the nearest possible point, and thence by stage-coach or express rider.

The telegraph net stretches from La Quiaca in the north, to Cape Virgins in the south, which is the farthest point to which telegraph communication at present extends.

Compulsory naval and military service was established by a law passed in 1901. The navy is composed of about twenty-one vessels of fighting value, and many transports, river-gunboats, and other auxiliary ships. The standing army comprises 12 regiments of cavalry, 4 battalions of engineers, 8 regiments of artillery, 18 battalions of infantry, and an efficient medical and transport service.

The extraordinary and rapid growth of Argentina during the last quarter of a century has amazed those who have never seen the country, but to those who have studied the making of this great agricultural and pastoral nation, its quick rise to its present place of importance has caused but little surprise, only a clearer understanding of its destiny among the nations of the world.

## II

## THE REPUBLIC OF ARGENTINA

## COMMERCIAL SECTION

Standard of Development. The Railway System. Total Mileage. Principal lines. Foreign commerce. Value of oversea trade in 1914. Order of commercial importance of principal foreign countries. Foreign trade of pre-war and war-period compared. Foundation of British commerce in Argentina. Principal imports and exports by value. Currency, weights, measures, and postage. Mining. Principal mineral regions. Mining laws and concessions. Industries. Cattlebreeding. Working of an Argentine cattle estate. Agriculture. Costs of planting and yields. Capital required for farming in Argentina. Sale of Government lands.

The whole territory of Argentina, with the possible exception of the antarctic southern extremity, has now been thoroughly explored and settled. The arable lands remaining the property of the state have been mapped, and are ready in every way for exploitation. All the primary undertakings and pioneer industries have already been established many years; therefore the openings for foreign capital do not lie in the same direction as they do in countries which have not yet received so great a commercial impetus, or attained the same high degree of development.
The same may be said of commerce in the many large cities and towns, where the international competition is very keen, and only the best or most marketable productions of the world should be exhibited for sale by foreign merchants and travellers.

## THE RAILWAY SYSTEM

One of the most important factors in the rapid growth of Argentina is the extensive railway system, which serves all but the few distant Territories, and places her eighth for railroad mileage among the nations of the world. There are approximately twenty-two thousand kilometres of line in operation and two thousand in course of construction. This network of iron roads is divided amongst twenty-one separate undertakings, three of which belong to the state, and by far the largest proportion of the others to English companies.

The following table gives the names of the principal railways and their approximate length in kilometres. Several of these lines have added considerably to their respective mileage, both in operation and under construction, during recent years. The total length of railway lines added to the Argentine system since the following statistics were compiled is approximately 2,000 miles in operation and 2,000 miles in various stages of construction, but details of the exact extensions to each individual line are not available.

| Railway. ${ }^{1}$ |  |  |  | APPROX. LENGTh. |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Kilom. |  |  |  |  |

## Branch Lines.

Andine :
Extension from La Toma to Dolores - - 146

[^2]
## APPROX. LENGTH. KILOM.

## Central Northern :

Extension to Bolivia - - - - - 289
Branch Lines - - - - - - 257
North Argentine :
Tinogasta Line - - - - - - 425
Cable Line to Famatina - - - - 34
Branch Lines - . - - - - 400
Private.
Southern Buenos Aires - - - - - 3.980
Western Buenos Aires - - - - - 1.197
Bs. As. and Rosario - - - - - 1.997
Central Argentine - - - - - 1.785
Bs. As. and Pacific - - - - - 1.261
Argentine Great Western - - - - 714
Bahia Blanca and N.W. - - - - 385
East Argentine - - - - - 161
North-east Argentine - - - - - 662
Entre Rios - - - - - - - 758
Province of Sante Fé - - - - - 1.392
Cent. Córdoba (N. Sec.) - - - - - 885
" ", (E. Sec.) - - - - 210
Córdoba and Rosario - - - - - 289
North-west Argentine - - - - - 196
Córdoba and North-west - - - - 153
Transandine - - - - - - - 175
Central Chubut - - - - - - 70
Branch Lines and Extensions.
Southern :
High level lines to Sola and Gral. Mitre - 12
Branches of the Main Line - - - . 140
Western :
Low level - - - - - - - 3
Branch lines - . - - - - 220

GOVERNMENT HOUSE: PLAZA DE MAYO, BUENOS AIRES.

banco de la nacion argentina, buenos aires.


CAICIUM CARBHDE FAC'TORY AND ELECTRIC LIGHT WORKS OF THE COSQUEN RAILWAY.

APPROX. LENGTH.

## RAILWAY.

Central Argentine :
Branch lines40

Prov. Santa Fé :
Branch line - - - - - 162
Chacabuco to Sargento Cabral (Concession) - 500
General Total - - 20.919
The principal railroad centres are: Buenos Aires, Rosario and Santa Fé.

## FOREIGN COMMERCE

The long Atlantic coast of Argentina, which is indented by many natural harbours and includes several fine ports, together with the wide area served by railways, and the magnificent gateway to the Republic-the Rio de la Plata-have secured for it a very considerable maritime commerce with almost every country in the world. The facilities offered by the extensive combination of railways and ports for placing the produce of the interior on the quays ready for export at a comparatively cheap cost and without loss of time, are highly favourable for the rapid development of foreign commerce.
The average annual value of imports and exports from and into the Republic in 1913-14 was approximately $£ 54,363,600$ and $£ 69,850,800$ respectively, and Argentina's best customers, in order of importance, were, the United Kingdom, France, Germany, and the United States. Great Britain's trade with the Republic for the ten years previous to 1914 was more than double
that of any other country, but in 1910 the first sign of decreasing imports from the British Isles became apparent. At the same time the exports to that country had more than doubled themselves within twenty years.

During the past five years of world wide warfare the total foreign trade of Argentina amounted in average annual value to $179 \frac{1}{2}$ millions sterling, made up of imports $73 \frac{1}{2}$ millions and exports 106 millions. The British trade with Argentina during the same period averaged about 47 millions, consisting of imports into Argentina 16 millions and exports from that country 31 millions. The United States trade totalled 58 millions, of which 27 millions was the value of the imports. This, be it remembered, in a country where, in pre-war days, Great Britain was commercially predominant and the United States was fourth in the list.

The trade with France-hitherto second in order of commercial importance-dropped to $18 \frac{1}{4}$ millions sterling, made up of $4 \frac{1}{4}$ millions worth of exports to Argentina and 14 millions in value for imports from that country. Brazil comes next with a total commerce of $11 \frac{3}{4}$ millions sterling, then Italy with $10 \frac{1}{2}$ millions, Spain with 7 millions, Chile, Paraguay, and the Netherlands, with $1 \frac{1}{2}$ millions each, and Japan with $1 \frac{1}{4}$ millions.

To the British figures must be added, however, a total trade of three-quarters of a million sterling between Argentina and the self-governing Dominions and India.

There are solid foundations for the hope that British trade in Argentina and some of the other South American countries may make rapid strides during the coming years of peace. It was to British capital and brains that these countries owe, in large measure, their present highly prosperous and developed conditions, and it may
therefore safely be presumed that the roots so firmly planted for over fifty years have survived the hurricane of war and will revive if only British Governments, workers, manufacturers, and merchants realize that by adventure, adaptability and organization, not only can the old standards be surpassed, but much of the surplus trade, accruing from the natural expansion of these countries and from the curtailment of German activity, be secured for the people of the British Isles.
The principal articles of import, in order of value, are : textiles ( 16 millions sterling), food products (12), iron and steel (8), pottery, glass, clay, etc. (53 $)$, oils (4), drugs and chemicals (4), metal products ( $3 \frac{3}{4}$ ), timber, etc. ( $3 \frac{1}{4}$ ), paper, etc. $\left(2 \frac{3}{4}\right)$, agricultural produce and machinery (each $2 \frac{1}{2}$ ), beverages ( $1 \frac{3}{4}$ ), electrical apparatus $\left(1 \frac{3}{4}\right)$, tobacco ( $1 \frac{1}{2}$ ), dyes, colours, etc. ( $\frac{3}{4}$ ), leather manufactures $\left(\frac{3}{4}\right)$, live animals $\left(\frac{1}{2}\right)$.
The chief exports by value are : products of animal industry ( $70 \frac{1}{2}$ millions sterling), agricultural products (22), lumber and timber ( $5 \frac{1}{2}$ ), other products (24 $)$. There are no export duties.

## CURRENCY, WEIGHTS, MEASURES AND POSTAGE

The principal coin is the gold peso $=4 \mathrm{~s}$., or U.S. $\$ 0.965$, but there is a very large circulation of paper pesos, the value of which is about 1s. 9 d., or $\$ 0.424$ U.S. currency. There are 100 cents to the peso.

The metric system is the legal standard, and is in general use in all parts of the country, except the remote interior. Owing to the cosmopolitan nature of Argentina's population English, Spanish, Italian, German, and Russian, measurements are occasionally used.

It is important to note that although Argentina is well served by ocean cables, wireless, telegraphs, telephones, and letter services, there is no parcels post. The postal rates are those of the Postal Union.

## GENERAL OOMMERCIAL REGULATIONS

In almost every country there are various laws and customs relating to trade and commerce which cannot be properly classified under any single heading. Argentina is certainly no exception to this rule, for there are no fewer than 50 different classes of commercial licences, and the amounts payable annually vary from 20s. to £5,500. Retail merchants pay from 36s. to $£ 181$ per annum ; wholesale merchants from $£ 13$ to $£ 271$; importers of jewellery from $£ 45$ to $£ 181$; importers and exporters (combined) from $£ 45$ to $£ 543$; electric lighting companies from $£ 45$ to $£ 90$; and such undertakings as co-operative societies, mortgage banks, gas companies, banks and money changers, are required to pay a considerable additional amount every year.

Under the Licence Law business houses of all kinds are required to take out an annual licence. Foreign insurance companies are compelled to invest amounts varying from $\$ 100,000$ to $\$ 300,000$ (about $£ 9,000$ to $£ 27,000$ ) in National Bonds, and must also pay a licence charge of from $\$ 3,000$ to $\$ 6,000$ (about $£ 270$ to $£ 540$ ) for one risk and half the same sum for every additional risk undertaken. In addition to this a percentage ranging from 2 to 7 on the premiums is charged by government.

It is important to note that all tenders and proposals for public works must bear stamps varying in value from 20 cents to 1,000 dollars (about 4 d. to $£ 90$ ).

According to Argentine commercial law, all mercantile books must be kept in a prescribed manner ; and in addition to this requirement the letter-copying book, journal, and cash book have to be stamped with the "Rubrica," or mark of the Commercial Tribunal, which, when attested by the signatures of a Commercial Judge and the secretary-notary to the Tribunal of Commerce, renders them valid, legally, for purposes of evidence before the Courts of the Republic. The importance of this law will be apparent when it is pointed out that an insolvent trader whose books have not been marked with the "Rubrica" cannot obtain his discharge. Merchants are compelled to return balancesheets once in every three years ; and mortgages cannot be effected for a longer period than ten years.

The laws relating to deeds, contracts, and bills of exchange are similar to those in vogue in England. When questions arise regarding the validity of contracts made abroad the Argentine Courts apply the laws of the country in which the contracts were made.

Notwithstanding the fact that the Patent Law of Argentina was drawn up and sanctioned as far back as 1864, there are several highly commendable provisions. For instance, independent of the " provisional protection " of an invention, which is granted for one year (with annual renewals) for a fee of $\$ 50$, full patent rights may be obtained for five, ten, or fifteen years ; the fees payable being $\$ 82.66, \$ 206.66$ and $\$ 301.66$, respectively ( $£ 74 \mathrm{~s}$., $£ 18$, and $£ 26$ 12s.), and poor inventors are able to make arrangements with the government to pay these fees by annual instalments. Foreign patented inventions can, however, only be patented in Argentina for a maximum period of ten years;
and all inventions for which patents have been obtained must be exploited in the Republic within two years.

## MINING

From the time when Argentina was a Spanish colony, up to the present day, many small towns in the centre and north, along the eastern slopes of the Andes, have depended entirely upon the mining industry, which is steadily growing in importance as the railway lines link up the mineral producing districts with the commercial centres of the coast.
Many of the rich mining districts have been for several years in close proximity to branches of the main railway lines of the country; but new zones are constantly being discovered in unexplored regions among the rugged passes of the Andes : and it is known that throughout the whole extent of this great mountain range, from Tierra del Fuego in the extreme south of the Republic to Jujuy on the Bolivian frontier, precious metals exist in abundance, but up to the present the output has not been large.
Many of the mining companies, which have steadily carried on work during recent years with the latest machinery, have met with considerable success, notwithstanding the great difficulties of transport and means of communication.

The most important mining regions and the ores or minerals produced are as follows:

Province of Mendoza.-Copper, petroleum, coal, alabaster, slate, and marble.

La Rioja.-Famous for its rich mines of native
silver and copper, situated in the districts of the Cerro Famatina, which are connected by cable line with Villa Argentina, a station on the main railway.

Province of Catamarca.-The most important mining zone of this Province is the Cerro de Capillitas which contains several valuable copper mines.

The smelting works are located in the midst of a large forest which will provide an abundance of fuel for many years to come.

Province of Jujuy.-Many rich veins of copper exist, and gold, in considerable quantities, is found in the beds of the rivers which flow through the mountains.
The continuation of the railway line to the Bolivian frontier will doubtless stimulate the development of the mining industry in this and the adjoining Provinces.
Province of Córdoba.-This region is immensely rich in copper, manganese, and coloured marble; and has the great advantage of being connected by railway with the sea coast.

Territories of Chubut, Neuquén, Santa Cruz, and Tierra del Fuego.-The rivers and sands on the Atlantic coast contain an abundance of gold dust. The presence of this precious metal in nearly all the mountain streams leading down from the Cordillera encourages the belief that rich veins exist at the head-waters among the heights.

Want of perseverance and lack of practical knowledge and capital have up to the present retarded the development of prospecting and placer mining in these southern latitudes.

The great extent of the Andean range, which traverses the entire length of the Republic, has made almost impossible the task of complete prospecting. Many
vast regions remain unexplored to this day, and must remain so until a large number of expert miners travel the whole extent of the Andes in search of precious metal-a task which would require a lifetime.

The character of the mountains in the mining zones is very rugged ; deep canyons cut the narrow passes, and the lofty peaks are surrounded by broken masses of low Cordillera. This, however, greatly assists the mining industry as, in many cases, it enables the veins of ore to be worked from level galleries. The climate of this magnificent mountain region is extremely healthy, although the high passes are blocked by snow in winter.

Mining Concessions.-The laws relating to prospecting and mining in force throughout the whole Republic are exceptionally liberal, and well calculated to stimulate the further development of this important industry.

Prospecting in every region of the Andes, and on all public ground which is unoccupied, is permitted without the necessity of applying for a concession or licence. Upon the discovery of mineral all that is necessary is to present an application for a concession in duplicate, accompanied by specimens of the ores extracted, and a plan of the exact location. When the officials of the Federal Government have made the necessary surveys a definite title to the property is given to the discoverer.

No taxes are imposed on mining properties, nor on the minerals extracted. The export of all kinds of ores or metals is also free of duty.

The sole obligation enforced is that all mines shall be worked by at least four men for not less than two hundred and thirty days in the year, or the Government will consider the mine abandoned.

## INDUSTRIES

Cattle-breeding.-Stock raising is one of the best paying industries in Argentina, owing to the low value of land and the cheap system of extensive breeding on natural pastures. The climate of the country admits of animals being born, reared, and fattened in the open, thus doing away with the necessity for the erection of enormous and costly shelters.

The Territories and Provinces most suitable for breeding purposes are as follows: Buenos Aires, Entre Rios, San Luis, Santa Fé, Córdoba, Pampa, and Neuquén, which are especially adapted for raising horses, cattle, and sheep, and can maintain from three to twelve sheep and two cows per hectare. The northern Provinces of Corrientes, Formosa, and the Chaco are admirably suited for cattle-breeding, while the southern portion of the country, in the Territories of Rio Negro, Chubut, and Santa Cruz, is principally suitable for sheep-farming on a very large scale.

The number of animals in the Republic is approximately as follows :

| Cattle | 32 millions |  |
| :--- | ---: | :--- |
| Horses | 10 | $"$ |
| Sheep | 83 | $"$ |
| Mules | 6 | $"$ |
| Goats | 5 | $"$ |
| Pigs | 3 | $"$, |

The working of an Argentine cattle-breeding estate is specially described here in the words of the Ministry of Agriculture of the Federal Government.
" All 'estancias' are organized and worked, more or
less, on the same lines; the property is enclosed and divided by wire fences into paddocks, varying in area from 200 to 6,000 acres and having one, two or more wells, and troughs, for watering stock, when the property is not crossed by streams. A certain number of these enclosures are used exclusively for breeding stock, whilst those yielding the best pasture are reserved for fattening and the remainder for tillage or for dairy cattle. The head station or 'estancia' house is generally located, more or less, in the centre of the property, and is usually surrounded by an orchard, vegetable garden, flower garden, and by plantations of timber and ornamental trees. It comprises : the owner's and manager's houses ; labourer's or 'peon's' quarters; the barns for storing machinery, implements, hides, wool, grain, etc.; the shearing shed; the stables or barns for pure bred breeding stock; the sheep dip; coach and harness houses, the poultry house, etc., etc. Cattle are kept in separate paddocks, according to sex and age, and are worked and looked after from the central station; pure bred stud herds and flocks are reared in paddocks adjoining the central station ; sheep are kept in flocks of from 1,200 to 2,000 head and are shepherded by men (who are paid a monthly wage or else receive 20,30 , 40 , or 50 per cent. of the produce of the flock) living with their families in detached houses, generally located just within the limits of the property, or on the division lines of the paddocks. Nearly all breeding 'estancias' keep cattle, sheep, and horses-there being very few where one kind of stock is exclusively kept. Only sufficient sheep for home consumption and as small a number as possible of horses are kept at 'estancias' where cattle fattening is the main object. When
dairying forms part of the work of a breeding or fattening ' estancia,' milch-cows are kept in herds of 150 to 250 ; and the dairymen who have charge of the care and milking of each herd, receive from 40 to 50 per cent. of the profits obtained by the sale of milk, or cream, forwarded daily to creameries, butter factories, or to retail sellers of dairy products. When agriculture is combined with animal industry it is generally carried on by families who work areas of $125,250,500$ or 750 acres, and who are supplied with the necessary implements, machinery and working animals, and receive half the crop. Sometimes the 'estanciero' only provides the land and working animals and receives 10,15 , or 20 per cent. of the crop-paying the threshing expenses of his share."

Agriculture.-The agricultural industry has received great impetus during the last five years, and there are approximately 62 million acres at present under cultivation. The average value of exports which can be classed as agricultural already reaches the high figure of one hundred million dollars of gold. When, however, it is taken into consideration that in this huge country there are over $104,300,000$ hectares of arable land eminently suitable for agricultural purposes, and for the most part requiring no fertilizers, it will be seen that this amount, large as it is, is insignificant in comparison with what may be looked for in the future.

Three-quarters of the total area under cultivation is occupied by cereals-wheat, maize, and linseedwhich are now exported in large quantities.

The Provinces most suitable for agriculture, owing to the climatic conditions and to the proximity of the

TERRITORIES OF SANTA CRUZ, EAST OF NEUQUÉN, RIO NEGRO, OR CHUBUT,
都
la pampa, buenos aires, or santa fé.
On rented land, capital being

Net proceeds $\$ 1,700$ to 2,$000 ; \$ 2,000$ to 3,$000 ; \$ 10,000$ to 12,000 .
markets and ports of shipment, are Buenos Aires, Santa Fé, Córdoba, Entre Rios, and the Pampa.

The cultivation of rice, cotton, and sugar-cane is carried on in the Province of Tucumán and in the Territories of Chaco, Misiones, and Formosa-these northern regions being admirably suited for the raising of semi-tropical crops.

The cost of planting one hectare of sugar-cane is about $\$ 120$ and, if properly attended to, it will remain in producing condition for nearly twenty years. The average yield of cane per hectare is 30,000 kilos.

A coming industry is the cultivation of fruit, which is, as yet, only at the beginning of its reign of prosperity. The varying climates of the different regions of Argentina enable almost every kind of fruit to be extensively grown, from the peach, apple or medlar, to the banana, pineapple, or chirimoya. The wide area now served by railways and the rapidity of transport, which furnishes the means of exporting the produce to the European markets, combined with the cheap price of land, fertile soil, and an equable climate, leave no doubt of a brilliant future before this branch of farming.

In the northern Provinces of Corrientes, Tucumán, Salta, and Jujuy, the area under tobacco is steadily on the increase. The average yield of this valuable commodity is 1,200 kilos per hectare.

Last, but by no means least as regards importance, comes the cultivation of the vine, which flourishes in the Provinces of Mendoza, San Juan, La Rioja, Córdoba, and Entre Rios. The total area of the vineyards of these provinces is approximately seventy thousand hectares, and the estimated average production of wine per hectare is about sixty hectoliters.

The extensive forests of the Republic contain an abundance of excellent timber which is largely exported.

Capital required for farming in Argentina.-The necessary capital required by a family for the purchase and cultivation of a farm of 100,50 , or 25 hectares under wheat, maize, and linseed has been estimated by the Department of Agriculture, and is shown in the table on page 28.

The capital required for starting a stock-breeding ranch in the most favourable Provinces, which are situated within easy radius of the Federal District, as given by the same Department, is shown in the table on page 29.

## SALES OF GOVERNMENT LAND

The Federal Government possesses more than thirtytwo thousand square leagues of land in the various pastoral and agricultural Territories previously described, and about 35,000 sq. miles are annually offered for sale.

The State lands suitable for cultivation or cattlebreeding are disposed of in the three following ways :

1. The formation of agricultural colonies and towns.
2. The formation of pastoral colonies.
3. Sale by public auction.

Agricultural colonies are composed of small urban or town lots of about fifty square yards, which are called " solares," and two kinds of rural lots, named " quintas" or lands bordering on towns, which cover about fifteen hectares, and "chacras," or country farms, having a maximum extent of one hundred hectares.


A PNEUMATIC HARVESTER AT WORK, PROVINCE OF BUENOS AIRES.


A CATTLE RANCH, PROVINCE OF ENTRE RIOS.
capital equivalent to $\$ 500$ paper currency for each 2,500 hectares.

The payment of purchase money is made in the following manner : a tenth part, plus cost of measurement at the rate of six cents paper currency per hectare, in cash on receipt of provisional warrant, and the balance in five annual payments with interest at six per cent. per annum.

Promissory notes must be signed for the amounts of annual payments, the property being considered as guarantee for due fulfilment.

The proprietary titles may be obtained whenever the legal obligations have been fulfilled and the full price paid, or also when these obligations have been fulfilled and a sixth part of the price paid at the time of purchase ; in the latter case the land remains mortgaged in guarantee of the balance of value.

Those who do not comply with the obligations established within the term appointed, will have to pay a fine equivalent to twice the territorial tax for the time that these obligations remain unfulfilled; this course will be taken even if all notes due have been paid.

Should a note that has fallen due not be paid, the land will be sold at public auction on account of the defaulting purchaser, thirty days previous notice having been given.

Should five years pass without fulfilment of conditions, the sale will be declared void, with loss of interest and improvements made.

The law only states the lowest values, and therefore the Government determines the upset prices in each case ; the base prices established by law are as follows:

Sales of land by public auction, forty cents gold or one dollar paper currency per hectare.

Each " solar" (town lot), ten dollars paper currency.
Each " quinta " or "chacra" (small farms) two dollars fifty cents paper currency per hectare.

The price of the lands purchased is to be paid, within a maximum term of five years, with interest at the rate of six per cent. per annum.

The minimum price of pastoral lots is determined by the Government according to the Territory in which the colony is situated.

## III

## THE UNITED STATES OF BRAZIL

## GENERAL DESORIPTION

This, the largest country in the southern half of the continent, is divided into twenty States, with the Federal Territory of the Acre and the District of the Capital of the Union, which is the seat of the Government.

Brazil has frontiers with every country in South America with the exception of Chile and Ecuador, and on its eastern side the Atlantic Ocean bounds it for a length of 3,600 miles.

This immense tract of land, measuring 3,292,693 square miles, occupies considerably more than half the Continent of South America, and includes regions of torrid heat and others with temperate climes. The population exceeds $27,000,000$ of which only forty per cent. are coloured.

Topographically considered Brazil is a vast table-land having an average altitude of two thousand feet above sea-level, intersected by many valleys, and watered by innumerable rivers. Two long mountain ranges cross the eastern portion of the country from north to south, the valleys between these chains being formed by the basin of the rivers San Francisco and Paraguay.

The Serra do Mar, or "Mountains of the Sea,"
beginning at Cape $S$. Roque, in the State of Rio Grande do Norte, follow the coast line through thirteen States to the southern frontier of the Republic in Rio Grande do Sul. The highest peak in this range is Orgaos, near the Bay of Rio de Janeiro, which is nearly 8,000 feet high.

Brazil possesses no very high mountains, but many peaks rising from five to eight thousand feet, the most notable of which are Itacolumi (5,700 feet), Itambé ( 5,981 feet), and Caraça ( 6,414 feet).

The extreme north of the country is formed by the immense plain of the Amazon, which includes the States of Para, Amazonas, Matto Grosso, and Maranhão. This vast territory, which forms the largest portion of the tropical zone, is watered by the Amazon, or "Sea-river," as it has been aptly termed by Brazilians. It is a region of valuable forests, many parts of which are quite unexplored.

The centre of the country includes the great plateau of Paraná, which extends over a large part of the States of Rio Grande do Sul, Paraná, São Paulo, Minas Geraes, and Goyaz ; the average altitude being about 1,000 feet.

In the extreme south are the famous prairies of the Rio Grande, which extend far over the frontier into the Republic of Uruguay.

The river system of Brazil is truly magnificent, the great Amazon alone affording 3,000 miles of fluvial navigation, and having three tributaries of over 600 miles in length and fourteen others, some of which are navigable for river steamers for a distance of over 1,000 miles. So great is the volume of water which flows from the Amazonian system that it colours the Atlantic Ocean for a distance of over 100 miles.

Besides the great network of water-ways known as
the Amazon, Brazil possesses thirty-two rivers of minor importance, which flow through all parts of the country, and afford means of communication with the surrounding foreign States.

## CLIMATE

In a country many million square miles in extent much diversity of climate may be expected. Brazil offers not only a great diversity of climate, but zones in which almost any degree of temperature can be enjoyed. For this reason it is necessary to divide this huge country into three separate divisions for descriptive purposes.

Tropical Zone.-This zone is bounded by the $77^{\circ}$ Fahr. Isotherm, which passes to the south of the State of Pernambuco, cuts on the north the State of Goyaz, and continues to the State of Matto Grosso, on a level with Cuyaba, its capital. The States of Amazonas, Para, Maranhão, Piauhy, Ceara, Rio Grande do Norte, Parahyba, and Pernambuco are included within this zone, the average temperature of which is $80^{\circ}$ Fahr.

Sub-Tropical Zone.-This zone may be divided into two distinct parts with reference to the rainfall. The first comprises the States of Alagoas and Sergipe, the sea-board of Bahia, the States of Espirito Santo and Rio de Janeiro, a portion of the sea-coast of the State of São Paulo, and the east coast of Minas Geraes. In this region the temperature ranges from $73.4^{\circ}$ Fahr. to $78.8^{\circ}$ Fahr. in the lower parts and from $64.4^{\circ}$ Fahr. to $69.8^{\circ}$ Fahr. in the higher.

The sea-board of the States of Sergipe and Bahia is reputed for its mild climate. During the hot season the nights are cool and make amends for the heat of the
day. At Bahia the average temperature is $77^{\circ} \mathrm{Fahr}$., the maximum being $86^{\circ}$ Fahr., and the minimum $66.2^{\circ}$ Fahr.

The south of the State of Bahia, the States of Espirito Santo and Rio de Janeiro, a portion of the sea-board of São Paulo and the eastern portion of Minas Geraes have an almost homogeneous temperature, averaging from $73.4^{\circ}$ to $75.2^{\circ}$ Fahr.

At Rio de Janeiro itself the highest temperature known has been $98.7^{\circ}$ Fahr., which is lower than the maximum temperature of Paris, where the thermometer has registered $104^{\circ}$ Fahr. The minimum falls to $50^{\circ}$ Fahr.

The coast of the State of São Paulo is flat and low, with excessive heat; but the ocean breezes, saturated with moisture, bring a welcome freshness. The interior of the State enjoys a very agreeable climate. In the capital the average temperature is $64.4^{\circ}$ Fahr., and the same may be said of nearly all the towns in the interior.

The State of Minas Geraes has an excellent climate. Situated as it is in the second division or sub-tropical zone, its climatic conditions are in contradiction with its latitude. In every part of the State there are remarkably salubrious regions. Taken as a whole, it may be regarded as a vast sanatorium.

Temperate Zone.-This zone includes the south of the State of São Paulo, the States of Paraná, Santa Catharina, and Rio Grande do Sul. Its average temperature, except on the coast, is always below $68^{\circ}$ Fahr., and the cold is bearable.
The maritime region is hotter and damper ; nevertheless, the mean temperature is about $68^{\circ}$ Fahr., as at Santa Catharina.

## RIO DE JANEIRO

Before commencing to describe the many important States of the Union, it is opportune to say something of Rio de Janeiro, the Federal capital.
The collection of one and two storey dingy buildings, which formed Rio de Janeiro during the early colonial period, bears no resemblance whatever to the splendid city of to-day. The capital has undergone an extraordinary transformation during recent years, and nearly all the narrow thoroughfares and dirty houses of earlier times have now been replaced by broad avenues, streets, and parks, lit by electric light and crossed by tramways.
The view of Rio from the sea is magnificent: a large city facing the blue waters of the bay and encircled by green-clad hills, upon the summits of which stand numerous white mansions surrounded by prolific growth, forms the foreground, while the distance is often obscured by the hot blue haze which hangs over the Serras da Tijuca and Gavea.
The extension of the port of Rio, and the other improvements which have been carried out, make it one of the finest harbours on the east coast of South America.
The maritime quarter of the city is certainly not encouraging, for here are the stores, warehouses, and other unsightly edifices of a busy port. The narrow streets are full of jostling Italian, Portuguese, Spanish and coloured labourers, and the pungent odour of coffee and tobacco, combined with the hoot of the sirens of steamers in the bay, while showing the commercial activity of Brazil's capital, make this portion of the city unbearable during the heat of the day.

regulations are rigidly carried out. The stagnant pools and swamps along the shore, which used to spread malaria and yellow fever, are now filled in, and one may walk with comfort and security along the fine promenades which have been constructed over what was once, perhaps, the most pestilential swamp in this State. The city possesses a model Health Department, and epidemics of yellow fever are things of the past.
Across the bay of Rio lies the seaside town of Nictheroy, which is the favourite summer resort of the inhabitants of the capital. All the year round steamers ply daily between these two places, and throngs of holiday makers may be seen crowding the decks eager for a breath of the ocean to temper the sweltering heat.
The "Harrogate" of Brazil is the small town of Petropolis which is situated up in the mountains some few miles from the capital. This clean, pretty, little hill-resort is as unique as it is exclusive. The streets are lined on each side with pink and white magnolias ; and small streams, with cool grassy banks, run down the centre of many of the fine avenues.
At Petropolis is situated the summer residence of the President; and white stone mansions standing in beautiful grounds show that many wealthy Brazilians have followed the President's example. The climate is cool even during the hottest months of the year, and in winter the wind is often cold enough to necessitate the use of an overcoat.

The railway journey from Rio to Petropolis affords an endless panorama of beautiful scenery, the line winding among mountains clothed from foot to summit in the rich green of tropical growth, the valleys and
hillsides covered with coffee, sugar, and other plantations and the white bungalows of the estate-owners nestled amid the tangled foliage. As the train mounts higher the scene becomes more wild, gorges filled with trees and rugged mountain crags stand out in bold relief against the blue sky, until at last the heights of the Serra do Mar are reached and the train enters the small white station of Petropolis.

## THE STATES OF BRAZIL

The State of Rio de Janeiro, in which is situated the Federal District, has Nictheroy for its capital, and is one of the most progressive States of the Union. The principal exports are coffee and cereals.

South of Rio lies the State of São Paulo, which is one of the richest and most important in all Brazil. The rapid growth of this State is principally due to the extraordinary development of the cultivation of coffee. São Paulo exports sufficient of this valuable commodity to supply three-quarters of the world's demand, the average value of the coffee annually exported from this State being approximately $£ 17,000,000$ !

The city of São Paulo, which is the capital of the State of the same name, is only second in size and magnificence to Rio de Janeiro, and notwithstanding the great stream of Italian, Russian, Spanish, and German immigration which was constantly pouring in previous to the great war, it is one of the healthiest cities in South America. This fact alone proves the excellence of the system of drainage and the purity of the water supply. The epidemics of fever and small-pox which were once so prevalent in S. Paulo
and Santos, the port from which the bulk of the produce of this State is exported, have now entirely disappeared.

The population of S. Paulo City is 450,000 , of which more than half is composed of Italians and Germans. The cosmopolitan element of this city is immediately noticed by the visitor, who may walk through one of the main thoroughfares and hear, within the space of a few minutes, no less than seven languages, although when the immigrants from South Europe go to their colonies in the interior they settle down and become Brazilians in thought and spirit, and within a few years speak Portuguese, ${ }^{1}$ which is the official language of Brazil.

The staple industry of São Paulo is the cultivation of coffee. The many fazendas, with thousands of acres of brownish-red soil hidden beneath the olive green of the coffee tree, cover by far the largest portion of the 112,311 square miles which compose this rich State. The planting of young coffee trees commences with the wet season, which lasts from November to the end of January. On new estates three years must then elapse before the first crop is produced. The " picking" season starts about May and continues well into the month of September. Details of coffee cultivation will be given in later pages.

Santos, the chief port of this State, now possesses one of the finest harbours of Brazil. Transatlantic liners call almost every day, and the maritime activity is very great. The annual exportation of coffee from this port alone averages $9,000,000$ bags, weighing 1 cwt. 20 lb .

[^3]It is in Santos, with its 35,000 inhabitants, that one may see best the raw material from which the great and prosperous agricultural population of the whole south of the Republic is derived. This fine port is the principal landing-place for the thousands of Italian, Russian, and German immigrants who flock to this agricultural and pastoral El Dorado, to start a new life of freedom among the coffee bushes of São Paulo, or on the broad plains of the Rio Grande.

A visit to the immigrants' hotel, where the fresh arrivals are lodged until suitable employment is found, affords a cosmopolitan scene which is calculated to impress the most sceptical. The smiling faces of whole families of peasantry from the Russian Steppes, Italian valleys, or the vineyards of Portugal testify to the happiness which prevails among these immigrants to the New World.

On the southern frontier of the Republic, south of São Paulo, lies the great pastoral region known as the State of Rio Grande do Sul. Here gigantic herds of cattle and horses are reared, and the life of the colonist is like that on the plains of Argentina. The climate is exceptionally well suited to immigrants from Europe, as it is neither too hot nor too cold.
The capital is the fine city of Porto Alegre, which has a population of about 120,000 . The chief export from this State is hides, the average annual value of which exceeds $£ 1,800,000$.
The next most important State in southern Brazil is Paraná, the staple industry of which is the preparation of maté or Brazilian tea. The shrub, from which the leaves for making this tea are collected, grows wild in the great forests of the interior, and thousands of
labourers are employed in gathering the leaves, which are then dried over fires made of woods which, when burning, give off aromatic fumes. The process of " drying " lasts for about twenty-four hours, after which the shrivelled leaves are ground to a coarse powder and sewn up in hide bags ready for export.

Maté tea, which is the universal beverage of South America, is prepared for drinking in the following manner: The powdered leaves are placed in a small bowl, and boiling water is then poured upon them causing an infusion. A long silver or china tube, having a perforated bulb at its lower extremity, is next placed in the tea, which is sucked up the tube in the same manner as drinks from American soda-fountains.

Maté forms a hygienic kind of tea which, although much appreciated in South America, is as yet little known in Europe. During the Paraguayan War both armies used this beverage with excellent results. During protracted engagements, and when it was necessary to undertake long and rapid marches, the soldiers were almost exclusively fed on maté, and the commanding officers of both forces testify to the increased powers of physical endurance which it gave the troops under their command.

The "peons," or cowboys of the Brazilian prairies, upon rising in the morning take a bowl of maté, and are then capable of riding hard through the sweltering heat of a tropical day without any food whatever, their only proper meal being taken in the evening, when the cool night breezes awaken life and energy.

The exportation of maté from this State to the various countries of South America is very considerable, amounting in one year to the value of $£ 1,700,000$.

The State of Paraná possesses two good seaports, Antonina and Paranagua, which facilitate exchanges with all foreign countries. Curitiba, the capital, with a population of about 65,000 is connected by rail with these two harbours.

Before describing the vast mineral zones in the States of Minas and Bahia, or the regions bordering on the mighty Amazon, we may here give a list of the smaller and less important States of the Union, together with the names of their capitals and the staple products.

| State. |  | Capital. |  | Staple Product. |
| :---: | :---: | :---: | :---: | :---: |
| Espirito Santo |  | Victoria - |  | Coffee and sugar. |
| Santa Catharina |  | Florianopolis |  | Timber, cereals, and maté. |
| Sergipe |  | Aracaju - |  | Sugar and cotton. |
| Alagoas - |  | Maceio |  | Cotton and sugar. |
| Parahyba |  | Parahyba |  | Cotton, sugar, and coconuts. |
| Rio Grande do N | te | Natal |  | Salt, cotton, and sugar. |
| Ceara | - | Fortaleza |  | Cotton. |
| Piauhy | - | Therezina |  | Medicinal essences and carnauba wax. |
| Maranhão | - | S. Luiz |  | Cotton, tobacco, and cattle breeding. |
| Matto Grosso - |  | Cuyaba |  | Rubber, minerals, cattle breeding. |
| Goyaz - | - | Goyaz - |  | Tobacco, cattle, and minerals. |

The two last named States are totally unexploited, and in many parts even unexplored. Many years must elapse before this vast interior region can hope to attain the same commercial importance as any of the other States of the Union.

The chief mineral regions of Brazil are situated in the States of Minas Geraes and Bahia. The first decree
authorizing the working of gold mines was signed in 1824, and under its authority there was founded in London the Imperial Brazilian Mining Association. The success of that concern led to the formation of many other companies.

The principal gold mines worked during recent years are as follows:

| Morro Velho. | Passagem. |
| :--- | :--- |
| Sao Bento. | Juca Vieira. |
| Cuyaba. | Descoberto. |

Diamonds were first discovered in Brazil in 1727, and since then the mines have been almost continually worked. In the State of Minas were found, some years ago, two of the largest diamond carbonates ever discovered. These magnificent gems sold for about £16,000 each.

The diamond is principally found in the alluvial deposits of certain rivers in Minas Geraes, particularly near the town of Diamontina, although many fine specimens have been discovered quite recently in the States of Goyaz, Matto Grosso, Paraná, and Bahia. The average value of precious stones exported from Brazil is approximately $£ 108,000$.

Large deposits of manganese are known to exist in the States of São Paulo, Santa Catharina, Paraná, and Goyaz. In the district of Queluz (Minas) there are no less than five companies working this ore that have their own lines to convey it to the Central Railway of Brazil. The exportation of this mineral averages 250,000 tons.

Iron ore is found in abundance in the States of São Paulo, Santa Catharina, Espirito Santo, Matto Grosso,

Goyaz, Minas Geraes, and Bahia ; copper in the States of Minas Geraes, Maranhão, Bahia, and Ceara; and lead in Minas Geraes, São Paulo, and Rio Grande do Sul.

The extreme north of Brazil comprises the vast territory watered by the Amazon. This, the tropical zone, is divided into several states and the territory of the Acre. The principal States are Para and Amazonas, the general characteristics of which are dense tropical forests and swamps. The great staple of the whole of Amazonia is rubber, which is exported in enormous quantities.
The State of Para is situated at the mouth of the Amazon, and possesses for its capital one of the finest cities in Brazil. Para City, or Belem, as it is more often termed, is the great port for the shipment to Europe and the United States of all the rubber collected from the hundreds of "estradas," or rubber estates, situated within reach of the lower section of the Amazon river. The city possesses many fine squares, parks, and avenues, and has a good electric tramway and lighting system; large steamers are able to come alongside the quays in the port, and so long as the price of rubber remains high in the European markets, Belem will continue to prosper.

The long voyage up the Amazon river from Belem to Manãos, the capital of the State of Amazonas, is not altogether an uninteresting one. The broad placid river shines in the brilliant glare of the sun like a bar of gold ; the distant, low-lying banks are shrouded in a damp, hot mist which does not lift until the sun has mounted high in the heavens. When the "Breves Narrows"
have been passed, and the banks become easily visible, a gorgeous scene of tropical beauty is unfolded.
On each side masses of tangled growth stretch away as far as the eye can reach; the gnarled trunks of trees embrace weaker saplings, orchids peep from beneath the luxuriant foliage, and here and there, as if to break the monotony of the scene, the white bungalows and " barracas," or store-houses, of the rubber and cocoa estates stand out in clear relief against the sea of green.

These dense jungles are the home of the jaguar, puma, and wild cat; crocodiles lie on the mud of the creeks basking in the sun, or sleeping under the cool shade of the prolific growth which completely covers the banks ; and birds of brilliant plumage have their nests in the lofty trees.

Several small fluvial ports are called at before the nine hundred miles of river, which divide Belem from Manãos, have been traversed ; and at each port-of-call hundreds of rubber " bollas," or balls, are taken on board, and a corresponding amount of manufactured articles are unloaded.
It is at night that one can best enjoy the beauty of the scene, for the air is cool and the surrounding forest is illuminated by the large mellow tropical moon. The calm water, the blackness of the forest glades, the ghostly palm trees, with nothing to break the peculiar silence save the occasional screech of some wild bird, or howl of beast, and the gentle hum of insects, are enchanting; and the passengers on the small river steamers mostly sleep on deck under the awnings.

When this long journey is over, and the steamer arrives off Manãos, a unique scene is afforded; for
here, in the heart of American equatoria, is a city with electric light, tramways, a magnificent theatre, and all the other attributes which make a modern metropolis.

Mañ̃os, the capital of the State of Amazonas, has a fine system of docks which allow Atlantic liners to come alongside the quays. So deep is the Amazon river that large steamships can navigate with safety up to Iquitos in Peru, a distance of over three thousand miles from the open sea.
There is but one main industry in the whole of this portion of Brazil, and that is the cultivation, collection, and curing of rubber. Both the States of Amazonas and Para depend almost entirely upon this industry for their revenue ; it is the great staple of the whole of Amazonia. More particulars regarding the cultivation of rubber trees will be given in later pages.
The enormous rise in the price of rubber in Europe and America, owing to the much increased war demand, has greatly benefited these two States, and they have now entered upon a new era of prosperity. Every month sees the opening up of some new rubber estate; and the great highway of the Amazon will be used more and more by the ships of all nations. Liners from Liverpool and other European ports now steam up this mighty river for thousands of miles, and for some years previous to 1914 it was possible to travel from Iquitos, Peru, to Liverpool without changing cabin.

In the forests of Brazilian Amazonia there is sufficient timber of all kinds to supply the world's demiand, and the valuable medicinal plants which grow in abundance, such as ipecacuanha and sarsaparilla, are too numerous to name.

## HARBOURS

The coast-line of Brázil, which is more than 3,600 miles in length, is dotted with innumerable natural harbours which admit large steamers, the principal being as follows:


Considerable improvements have been made in the harbours of Rio de Janeiro, Belem, Victoria, Pernambuco, Bahia, and Porto Alegre during recent years.

All parts of the Republic are connected with the Federal capital by the extensive telegraphic net which has a total length of nearly 56,000 miles, and many of the chief ports along the coast are joined by submarine cable with Europe and the United States.
Brazil, which was first a colony of Portugal, then a rapidly growing Empire, and is now a thoroughly
settled Republic, has been slowly but surely progressing for the last thirty-five years. The political troubles of the early colonial days greatly retarded the natural development, which, however, received its first impetus during the Empire, and now this vast and immensely rich country has thrown open its doors to the commerce of the world, with the result that harbours, railways, and public works of all kinds cannot be constructed quickly enough to meet the ever-increasing requirements of maritime activity. During this period of somewhat rapid development there have been one or two depressions, which were, however, mostly due to Brazil's dependence for the bulk of her export trade upon the world's demand for coffee, but other staple products are now giving a stability to the commercial situation. The granting of a preferential tariff to the United States of America also alarmed British traders, who felt that their position was jeopardized notwithstanding the open market granted to Brazil in the United Kingdom. In conclusion it is sufficient evidence of Brazilian prosperity to say that the exports have for some years exceeded the imports by $10-15$ millions sterling per annum.

## IV

## THE UNITED STATES OF BRAZIL

## COMMERCIAL SECTION

Foreign merchants and financiers in Brazil. Railways. Total mileage. Table of different systems. Railway concessions. Foreign commerce. Total oversea trade. Relative position of Great Britain and the United States. Effect of German colonies. British residents and British trade. Principal imports with values. Principal exports. Currency, weights and measures. General commercial regulations. Travellers. Tenders for public works. Food laws. Transfer of trade marks. Expiration of patents. Subsidies. Organization of motor haulage services. Machinery for public works. Free land for factories. Immigration and colonization. Railway colonization. Contracts with shipping companies. Mining. Mining code. Principal mineral and diamond regions. Coffee. Rubber. Commercial travellers' licenses.

The opening for foreign commerce and capital in Brazil is as wide as it is varied. Adventurous manufacturers who will adapt their wares to the Brazilian market, who will either themselves or through trusted representatives investigate the markets in Brazil, advertise, appoint agents, send out travellers, print catalogues in Portuguese, quote metric weights and measurements, give credit to well-recommended firms, read the Consular and Commercial Intelligence Departments' reports, and generally interest themselves in a Brazilian campaign can be assured of an adequate and reliable return for the risk and effort involved. Too many foreign manu-
facturers and merchants look upon South America as entirely Spanish, whereas Brazil, which is by far the largest country of the Sub-Continent, is a Portuguese speaking nation, with entirely different ideas, tastes, and requirements to those of Colombia, Chile, or the Argentine.

The financier or colonist may in this huge country choose the industry which he wishes to develop, or the trade which he has been accustomed to practise at home. It must be remembered, however, that the dormant wealth of Brazil lies in the natural richness of the soil, both agricultural, mineral, and sylvan, and that millions of square miles are as yet unexploited. Consequently, those who send money, or go themselves to Brazil for the purposes of large financial gain, should not be disheartened if an immediate return for their outlay is not forthcoming-the soil will not produce a harvest in a month, neither will mines yield gold to order ; and vast tracts of wild country cannot be developed in a day. When a quick return for capital is required, the investment should be made in populous centres where the initial work of exploitation has already been accomplished, and there remain merely openings for the introduction of new manufactures.

In Brazil, as in many of the South American countries, it is the pioneer who seeks fortune far afield who has the most chance of finding an El Dorado.

## RAILWAYS

The most important factor in the growth of vast undeveloped countries is the railway line. In this respect Brazil is remarkably well off, considering her enormous
area of territory and the difficulties presented by the peculiar configuration of the earth and the vicissitudes of the climate.

Brazil possesses nearly 16,000 miles of railway in working order, and about 4,000 miles in various stages of construction. When these lines are completed there will be no less than 19,000 miles of iron-road spreading out all over the country. The Brazilian lines connect with those of Uruguay, Paraguay and Argentina at Uruguayana in the State of Rio Grande do Sul, passengers crossing the Upper Uruguay River to the junction of the Argentine Railways at Los Libres. From this point Buenos Aires, (capital of Argentina) Montevideo (capital of Uruguay) and Asunción (capital of Paraguay) can be reached by rail, or the main Transandean line from Buenos Aires to Valparaiso can be joined and the Continent crossed to the Pacific Slope of Chile.

The following are the principal lines in operation :
(1) The Leopoldina Railway, which starts from Rio de Janeiro and penetrates, by various branches, the States of Minas Geraes, Rio Janeiro, and Espirito Santo.
(2) The Central do Brazil, which starts from the capital and connects it with the States of Rio de Janeiro, Minas Geraes, and São Paulo.
(3) The Mogyana, which runs from Campinas to Uberaba and Araguary, with a branch to Poços de Caldas. It is to be continued as far as Corumba, on the right bank of the River Paraguay, in the State of Matto Grosso. This line is connected to the Sapucahy railway at the station of Eleuterio, by the Itapira branch.
(4) The Paulista Railway, which runs from Jundiahy to S. Paulo dos Agudos and Jaboticabal.
(5) The Sorocabana e Ituana line, which starts from S. Paulo in two different directions to Avaré and Itapetinga; these two lines continue to the State of Paraná.
(6) The Oeste de Minas Railway, which is entirely within the State of Minas Geraes.
(7) Porto Alegre to Uruguayana, in the State of Rio Grande do Sul.
(8) Alagoinhas Joazeiro, in the State of Bahia.
(9) Chemins de fer bresiliens, from Paranagua to Curitiba, in the State of Paraná.
(10) Sapucahy, from Soledade, in the State of Minas Geraes, as far as the frontiers of the State of São Paulo.
(11) Santa Maria ao Uruguay, in the State of Rio Grande do Sul.
(12) Muzambinho, in the State of Minas Geraes.
(13) Central da Bahia, in the State of Bahia.
(14) S. Paulo Railway, which runs from Santos to Jundiahy.
(15) S. Paulo-Rio Grande do Sul, connecting the States of Rio Grande do Sul, Santa Catharina, Paraná, and São Paulo.
(16) Noroeste do Brazil, which runs from Bahuru (S. Paulo), towards the State of Matto Grosso.

The districts through which these lines run, and the cities and towns which they connect, may be seen on the map.

Railway Concessions-It is necessary, when applying for a railway concession, to lay before the "Technical Commission" plans of the exact route and all details of the proposed construction and after-working of the line, together with specifications of the land necessary for all purposes, and the various localities
in which it is required. Frequently the concession is made for a number of years, the whole undertaking afterwards reverting to the State upon the payment of a fixed sum, or upon a valuation.

All concessions for the construction of railway lines must finally pass before Congress, which considers all with impartiality.

## FOREIGN COMMERCE

The overseas trade of Brazil has reached an average annual value of 101 millions sterling, made up of exports 58 millions and imports 43 millions. During recent war years the commerce with the United Kingdom has dropped to 14 millions per annum, whereas that with the United States has risen to over 40 millions a year. The British imports into Brazil during the same period were valued at $7 \frac{1}{2}$ millions and the exports from Brazil at $6 \frac{1}{4}$ millions sterling, whereas the trade with the United States showed a difference of nearly 7 millions on the wrong side, the figures being $15 \frac{1}{4}$ millions worth of imports into Brazil and nearly 23 millions sterling paid for exports from Brazil. This, however, does not alter the fact that the value of the United States imports into Brazil was over double that of the British imports, notwithstanding the fact that previous to the Great War over 140 millions of British capital were invested in Brazilian undertakings and securities. To the British figures, however, must be added about $1 \frac{1}{2}$ millions sterling paid annually to India and the British self-governing Dominions for merchandise imported by Brazil, with no counterbalancing export trade.

France, Argentina, and Italy, were the next most
important traders with Brazil, in the order given. The total trade with these countries averages $10,8 \frac{3}{4}$ and $4 \frac{3}{4}$ millions sterling respectively.

It should be remembered that there are large, influential and rich German Colonies in Southern Brazil whose influence will be strongly exerted in the coming struggle of Germany to recover some of her lost oversea commerce. While this is confined to the private and public requirements of the Colonies themselves nothing can, in fairness, be said regarding it, but will it be so confined ? or will it seek by the influence acquired by residence to promote with might and main the re-expansion of the general commerce between the two countries ?

It would be no ill-advised policy if the great need of the British Empire for trade expansion abroad were brought prominently to the notice of her sons and daughters resident in foreign lands, so that by watchfulness and patriotism they might be encouraged to lend their invaluable aid to their Motherland, who has so recently and victoriously passed through the ordeal of fire that the name of "Englishman" should be respected throughout the world. Who are more able, at almost every turn, to promote British trade in a foreign country than the British residents therein. Their patriotism is beyond doubt, but do many of them realize the subtleties of commercial diplomacy, and realize that to openly show preference for the manufactures, art, dress, literature, music or cousine of countries or shops, other than the one to which they owe their birth or allegiance, or, to a more limited extent, the one in which they live, is to spread a propaganda, which may savour of cosmopolitanism, but is distinctly injurious to British overseas commerce.

But this is a digression, to return to the foreign trade of Brazil, the principal articles of import in order of value are, wheat ( 21 millions), coal and patent fuel (20), cotton manufactures (12), oils (10), wheat flour ( $8 \frac{3}{4}$ ), leather and leather goods (6), fish (6), iron, steel, and manufactures of same (6), cement (42 $)$, wire ( $3 \frac{1}{2}$ ), motor cars and railway material (3), machinery ( $2 \frac{1}{2}$ ), tin plate ( $2 \frac{1}{2}$ ), ammunition and fire arms (2), rosin ( $1 \frac{3}{4}$ ), electric supplies ( $1 \frac{1}{2}$ ), tools ( $1 \frac{1}{2}$ ), glassware (1), perfumes $\left(\frac{3}{4}\right)$, wooden manufactures $\left(\frac{3}{4}\right)$, salt $\left(\frac{3}{4}\right)$, tobacco leaf $\left(\frac{1}{2}\right)$, fruits $\left(\frac{1}{2}\right)$, rubber manufactures $\left(\frac{1}{2}\right)$, instruments $\left(\frac{1}{2}\right)$, paints ( $\frac{1}{2}$ ), belting ( $\frac{1}{2}$ ), meat products ( $\frac{1}{2}$ ), photographic supplies ( $\frac{1}{4}$ ), musical goods ( $\frac{1}{4}$ ), lighting apparatus $\left(\frac{1}{8}\right)$, inks ( $\frac{1}{8}$ ).

The principal exports are: coffee (about $\frac{3}{4}$ of the world's supply), rubber, hides, cattle, cotton, sugar, maté, cocoa, medicinal essences, iron, manganese, copper, gold, and diamonds.

Currency, Weights and Measures.-The standard of value is the gold Milreis of 100 reis $=$ U.S. $\$ 0.3244$. The paper milreis has an exchange value which fluctuates considerably in the region of 1 s . 3d. A Contos $=1000$ milreis.
The metric system is in general and legal use but the Portuguese measures of a libra $=1.012$ pounds and an arroba $=32.38$ pounds, are used for retail transactions in the smaller towns and country districts.

## GENERAL COMMERCIAL REGULATIONS

In several of the States of Brazil commercial travellers require a licence, and it is considered advisable for them always to register, as unless this has been done they
cannot enforce payment of a debt. Persons buying from an unregistered agent are able to refuse payment. Many firms sending out representatives first establish commercial relations with a Brazilian merchant who takes over the collection of all moneys due, thus avoiding several difficulties. Samples are subject to customs duty, and when above $£ 10$ in value must be accompanied, like ordinary merchandise, by a consular invoice. The Commercial Association of Rio is an organization which can smooth the path of the newly arrived traveller or merchant. (See also later Chapter-Regulations regarding Commercial Travellers in South America.)

Tenders for public works are only accepted from foreign firms having an agent in Brazil and who are officially authorised to do business in the Republic.

The food laws make an official analysis obligatory of every kind of food or beverage sold in Brazil, and the fee charged usually amounts to about 25 s .

It should also be noted that trade marks can only be transferred with a business, and that foreign patents registered in Brazil expire there at the same time as in the country of origin.

## SUBSIDIES

The Government of the United States of Brazil some few years ago authorized the granting of a subsidy of $£ 250$ per kilometre to syndicates, companies, or individuals, who, in accordance with regulations, construct public roads and organize motor services for passengers or goods between two or more States or through one. Subsidies are also granted by the Governments of the various States for the introduction of new industries
which may be considered desirable or specially applicable to any district or city.

Machinery, which is intended for public works or new manufactures, is mostly admitted into the Republic free of duty when previous application has been made ; and it is in the power of the authorities to abolish the export duty on various new manufactures as an inducement for the investment of capital in the exploitation of new industries. The local Government will often also grant free land for the establishment of factories. Substantial premiums are now offered to silk cocoon producers in order to encourage the recently established silk mills (principally at Petropolis) ; and efforts of a similar kind are being made by the Federal Government to establish a fishing industry. Chemical works are also required. There are about 11,400 factories in the Union.

## IMMIGRATION AND COLONIZATION

The immense tracts of fertile land now lying idle for want of labour have induced the Brazilian Government to grant many very liberal concessions to colonists and immigrants. A few of the principal regulations regarding colonization and immigration are given here to enable those desirous of information upon this subject to get a fair idea of what is given and what is expected. ${ }^{1}$

The Government assists as far as possible the passage to Rio de Janeiro or any other Brazilian port, and thence to the locality where the emigrant intends to settle. In

[^4]the ports of Brazil emigrants will be received by agents of the Government, and will be lodged and boarded by the authorities, who will also supply them with medical attendance and medicine from the time of their arrival until they leave for the locality they have chosen. Emigrants' baggage and tools are not subject to Customs duty. The emigrant is perfectly free to choose the place where he intends to settle. In those colonies established by the Federal Government, he will be provided with tools and seeds free of charge.

The Government will assist emigrants and their families for a period of six months as regards the clearing and preparation of the land they have bought.

An emigrant who arrives with his family can purchase a parcel of land in a rural district subject to deferred payment, and a period of at least five years will be allowed to complete the purchase. On each allotment a house will be built by the Government or by the emigrant himself, if he so desires. In the former case, the cost of the house is calculated upon the amount of the debt which the emigrant may have incurred to the Government.

A rural allotment will, in general, have an area of about 60 acres or 120 acres, according to its position. Every emigrant receives an account-book in which will be entered the price of his allotment and of his house, as well as the amount of all debts for which he may have become liable to the Government. If he is willing to pay in advance he is entitled to a reduction at the rate of 12 per cent. per annum on any sums he may owe, and obtains a definite title-deed for the same.

In the colonies the Government maintains three primary schools for the sons of emigrants.

## RAILWAY COLONIZATION

The colonization of land along or near railways, in course of construction or already in traffic, as well as along rivers navigated by steamers, ought to be undertaken and pushed by the various companies, independent of any initiative on the part of the Federal or States' Governments.

Colonization financiers, companies, or undertakings, must effect settling on approved land by the installation of families of immigrants accustomed to agricultural labour or cattle-breeding as owners of lots, properly measured and marked out, situated along, or within twenty kilometres of, either side of the railway or river, and in addition must construct public roads, or paths, through the colonies which they form.

The choice of the locality most fitted for nucleus and railway colonies will depend on careful study of all the circumstances essential to the development of the colony, special attention being paid to the mildness and healthiness of the climate, the abundance, quality, and distribution of the water, orographic conditions, the nature, fertility, and producing power of the soil, the extent of the forests, groves, plains, and land under cultivation, disposable area, etc.

The general plan, comprising the division of the land into lots, areas of the same, cart roads and paths to be made, and type of houses for the immigrants, must be submitted for the approval of the Federal Government and shall be executed in accordance with that approval. Otherwise, the aid and privileges treated of in this section will not be granted.

The land required for the nucleus or railway colonies
will be acquired by the company by purchase, concession, or by agreement with the States or private individuals, and, when necessary, its disappropriation will be authorized.

The company will maintain to the best of its ability, and in combination with the Federal Government, a propaganda service abroad for the sale of lots, duly marked out and prepared, to immigrants accustomed to agricultural labour or to cattle breeding, in order that they may come and settle thereon.

The Federal Government may authorize or promote, at its own expense, introduction of immigrants for the nucleus or railway colonies, and will pay their passages from the port of their country of origin to that of their destination, effect their disembarkation, house and feed them, and give them free transport to the station nearest the nucleus.

The service of settling the immigrants, including help given them for the same, will be at the expense of the company, which shall furnish the new arrivals with tools and seeds and, whenever convenient, give them paid work on the railway or near lots to make it easier for them to keep up the same, and shall supply them, whenever necessary, with advances of food or money until the first harvest.
Rural lots, with any improvements thereon, will be sold to the immigrants for cash or in instalments.
The price of lots and houses, and the conditions of payment, depend on the approval of the Federal Government, which reserves to itself the right of taking over or superintending anything which is in the interests of the colonists, or deals with the rights which are guaranteed to them.

The company must bind itself to aid the transport of the colonial produce, and grant a rebate or reduction in freights of 50 per cent. on the tariff in force, for five years, dating from the instalment of the first family on a lot of any nucleus or railway colony founded under the conditions of this section, or undertaken by the Union or by the States for the settling of foreign immigrants as owners of the land.

The company will render every aid in its power to immigrants for the improvement of their produce, and will stimulate the formation and increase of small industries ; it will promote in the colonies which it founds the creation of free primary schools, and will build churches for the immigrants, irrespective of denomination.

The Federal Government will grant, under the heading of " aid," premiums to any railway, or other company, which carries on with regularity the settling of foreign immigrants as owners of the lands as hereby laid down.

The premiums will be agreed upon and fixed when the general plan is approved, and must not exceed the following maximum :
I. $\$ 200$ for each house constructed on a rural lot, so soon as the type has been officially approved and the house is in the possession of the immigrant family.
II. For each immigrant family, which has never before been resident in the country, brought in from abroad at the expense of the company and settled on a rural lot:
(a) $\$ 100$ when the family has been settled for six months.
(b) $\$ 200$ when the family has been settled for a year and has increased the area of cultivation and the live stock, and shows every intention of continuing to do so.
III. $\$ 5,000$ for each group of fifty rural lots occupied by families of foreign immigrants who, in the same colony, and within two years of the settlement of the first family have received definite titles of ownership.

When fifty rural lots are definitely occupied by families of foreign immigrants, the company may settle five Brazilian families on neighbouring lots, and so on in the same proportion, and Government in this case will grant premiums.

The company may obtain from the State interested any other privileges and aid besides those granted by the Federal Government.

## CONTRACTS WITH SHIPPING COMPANIES FOR THE CONVEYANCE OF LMMIGRANTS

Immigrants will be brought in at the expense of the Union by shipping companies or ship-owners who have been duly authorized by representatives of the Federal Government. The price will be fixed beforehand, whilst the hygienic condition and the accommodation of the passengers must be fully approved.
The agreement shall be made with one or more companies, as and when, the Federal Government may determine, and preference shall be given to those who best meet the wishes of the Government and offer the best guarantees, together with low rates for rapid transit and good accommodation and treatment for the immigrants.

Any agreement for the introduction of immigrants will only remain in force at the convenience of the Federal Government, which reserves to itself the right, by its own action, or those of its accredited representatives, of exercising full legal powers, of choosing immigrants, of refusing those who do not comply with established conditions, of refusing permission to embark, of limiting the number of passengers, and, finally, of refusing to recognize the agreement at any time without any indemnity.

Only those immigrants will be introduced at the expense of the Union whose passages have been arranged with companies, with whom an agreement is in force, by the duly accredited representatives of the Government.

Whilst the agreement is in force the companies will also bind themselves:

To grant to all emigrants who shall be classed as immigrants, and who desire to come with second or third class passages, which they pay themselves, a rebate of 10 per cent. on the official rates, according to their ages and the ports of embarkation and disembarkation.
Never to charge higher prices than those arranged with the Federal Government in accordance with age, and between the same ports, for the transport of immigrants who are introduced through the officials of the Federal Immigration Service at the request of Governors of States, companies, associations, and private individuals who undertake to bear the expense.

## MINING

Since the days of the Portuguese régime Brazil has been famous for its great mineral wealth, and also for the purity and brilliancy of its diamonds. During the colonial period the mines of Minas and Bahia were worked by thousands of slaves, who toiled night and day in the labyrinth of subterranean galleries to enrich their masters. Upon the abolition of slavery many of these mines ceased to be worked owing to the scarcity of labour, and, notwithstanding the rich veins which are known to exist, the mining industry of the Republic has not yet received the impetus which its value warrants.

Prospectors in Bahia or Minas must apply to the Governor of the State for a licence, indicating at the same time the approximate region in which they desire to pursue investigation.

Upon the discovery of a mine it is absolutely necessary to register immediately the exact zone, and to deposit specimens of the ore extracted at the office of the Mining Delegation in the capital of the State. To avoid the possibility of any one petitioning for the same claim between the time of discovery and date of registration, it is advisable to notify the local delegate in the district.
When a free concession of land for mining purposes has been granted the concessionaire is compelled to commence operations as soon as possible, and to furnish a full report after two years.
The tax upon minerals varies from 2 per cent. to 10 per cent. upon gold, silver, or precious stones; 1 per


OURO PRETO, STATE OF MNAS GERAES.
The Commercial (entre of (iolif and Diamond Regions.


THE WORKINGS OF A MINE IN THE STATE OF MINAS GERAES.


WANHING COFFEE BERRIES IN THE STATE OF SÃO PAULO.

"'THE ROUND-UP."
"Pbons," or ('ow-boys, herding Cattie in the state of Rio girande.
cent. to 5 per cent. upon copper and manganese; and 1 per cent. to 2 per cent. upon coal or iron.

The mining code of Brazil contains many regulations regarding the procedure to be adopted in prospecting and mining, but the particulars just given form the basis of the laws.

The principal mining districts are as follows :
Gold.-The northern portion of the State of Minas and the south of the State of Bahia. Around Goyaz city and in the north of the State of Matto Grosso.

Copper.-The richest deposits of this mineral have been found in the State of Rio Grande do Sul. Copper is also being worked in the States of Minas, Ceara, Maranhão, and Bahia.

Diamonds.-Principally found in the alluvial deposits of the rivers in the States of Minas and Bahia. The new field for diamond prospecting, however, is in the States of Goyaz and Matto Grosso.
Manganese.-The working of the large deposits of this mineral is comparatively new, and up to the present has proved very successful. Manganese is chiefly found in the States of Minas, Santa Catharina, São Paulo, and Paraná.

Iron.-This mineral is found in large quantities in many States, but the best known reefs are situated at Ipanema in the State of São Paulo, and near the town of Sabara in Minas.

There has been for some years a great lack of prospectors in the far interior of Brazil. In the States of Goyaz and Matto Grosso prospectors would, in all probability, meet with great success.

## COFFEE

Brazil furnishes about three-quarters of the world's production of this commodity, and coffee represents the principal wealth of the country:- although this is the case, few people are aware of the country of origin when consuming it. The reason for this is that Brazil grows more than can conveniently be sold, and in proportion to the comparatively small output from all sources, also to the speculations in the distributing centres, which often causes, for commercial reasons, the place of origin to be suppressed, and is detrimental to the producing State.

Owing, also, to the enormous bulk to be handled, it is not found easy to induce planters to limit the exportation to standardized grades of the finest quality only. Not clearly understanding their own ultimate interests they are often tempted to export inferior kinds.

The Brazilian Government, in face of the low prices obtained for this commodity when grown in that country, and of its sale under the denomination of other origins when once it has reached European markets, devised a scheme for the protection and popularization of Brazilian coffee. No important beneficial results have, so far, been felt. This, however, is in no way due to any deficiency in the original idea, but is apparently caused by the inability of those responsible for its application to execute it in the most efficient manner.
Impartially expressing an opinion on this matter, I should say that there is no doubt that the grievances of planters are well founded, because their profits are
very small in comparison with the gain of the numerous intermediaries.

In Brazil, as in many other countries, all measures, even those directly affecting the interests of any and all industries, are left to the care of the State. Coffee planters and agriculturists, instead of organizing themselves into a strong body to devise the best means for ameliorating the conditions, have forced the State to become a merchant, a most prejudicial step to their cause.

Their salvation lies in the increase of consumption, and that increase cannot be obtained unless coffee is sold at a price within the means of the labouring classes.

Although it is impossible within these limits to deal with this subject in detail, a few figures may be given with regard to the production and cultivation of coffee in Brazil.

The chief producing States are:
São Paulo, Rio de Janeiro, and Minas Geraes, but coffee is grown also in Espirito Santo, Bahia, and Ceara -the combined production having reached the extraordinarily high figure, in 1906-7, of $16,000,000$ bags of 60 kilos each, this being the highest on record ; in more recent years only just over $13,000,000$ bags were produced.

The area occupied in these States by coffee plantations is equal to ten times that of Belgium, with about eight hundred million coffee trees systematically planted. Many of the " Fazendas " are as large as some countries, and have within their boundaries rivers with organized navigation and railways for the conveyance of their produce.

## RUBBER

The second staple product of Brazil is rubber, which is indigenous in the Amazon Valley, where it abounds in all directions.

Rubber is the coagulated latex of certain lactiferous plants, the best quality being obtained from the Heveas.

Until thirty years ago Brazil monopolized the rubber markets of the world, but since then, on account of the great increase in the demand, other countries have directed their attention to the cultivation of gumproducing trees on a very large scale, resulting in a great increase in the output, qualities, and process of pro-duction.-

Since the authorities in Brazil have observed the advancement of the industry in other countries, measures have been taken to regulate the cultivation and process of tapping and curing rubber ; and many well-arranged plantations are now to be found in Brazilian territory, not only in the valley of the Amazon but in several other States.

Besides several kinds of Heveas there are also other species almost as valuable, such as the Manicoba and Mangabeira, which grow principally in the States of Ceara, Piauhy, and Bahia, also in the unexplored forests on the S. Paulo side of the River Paranapanema.

There is a growing demand for rubber, owing to the continual increase in its application in almost every industry, and Brazil offers one of the best fields for its cultivation. The only difficulties encountered at present arise from the uneven distribution of trees in the forests and labour organization. The latter could easily be overcome by owners of rubber lands who would care to


RUES. BENTO, NÃO PAULO.


AVENUE PAULISTA, SÃO PAULO.


A FRONTIER POST BETWEEN CHILE AND ARGENTINA.


VALPARAISO BEFORE THE EARTHQUAKE: CHILE.
introduce suitable immigration, taking advantage of the facilities offered by the Federal Government.

The climate of the vast regions watered by the Amazon is not all that could be desired; nevertheless persons of all nationalities may be met there, enjoying the best of health, and the death rate is comparatively small; but in the other States where rubber can be cultivated with the greatest advantage, the health conditions can be said to be good for tropical climates.

Most of the Brazilian rubber goes ta the United States, where there is a market for any quantity that could be produced.

## V

## THE REPUBLIC OF CHILE

## GENERAL DESCRIPTION

The Republic of Chile occupies a narrow strip of land extending along half the western coast of South America, and including the insular region of Patagonia and the "Horn." The whole territory is nearly 3,000 miles long, with an average width of about 70 miles, and comprises in all 290,000 square miles, with a population of 4 millions. It is bounded on the north by the Republic of Peru, on the east by Bolivia and Argentina, and on the west and south by the Pacific Ocean. The crest of the Andes forms the frontier between Chile and the Argentine Republic.

Many islands in the Pacific, including Juan Fernandez, or Robinson Crusoe's Island, and Pascua, or Easter Island, are also under the suzerainty of the Government of Chile.

From a commercial point of view the mainland may be considered to consist of four different regions, whilst for administrative purposes it is divided into twentythree Provinces, and the Territory of the Magellans, or Chilian Patagonia. The northern region, composed of the Provinces of Tarapacá, Tacna, Antofagasta, Atacama, and Coquimbo, includes by far the richest
zone in all Chile, for here are the nitrate fields on the desert of Atacama, the working of which has for many years formed the principal industry and export trade of the country; here, also, lies the mineral wealth. Gold, silver, and copper exist in large quantities ; and very many rich mines are scattered over this, the most productive zone.

Central Chile comprises the commercial and agricultural region, and includes many fine cities. It contains the Provinces of Aconcagua, Arauco, Bio-Bio, Cautin, Colchagua, Concepcion, Curicó, Linares, Malleco, Maule, Nuble, O'Higgins, Santiago, Talca, and Valparaiso.

To the Province of Valparaiso belongs the Juan Fernandez group of islands, the traditional home of the shipwrecked mariner, Alexander Selkirk, known to the world as Robinson Crusoe. Along the shores of these islands extensive fisheries have been established. The principal object of interest in Juan Fernandez is Crusoe's grotto-a yawning black cavern in the side of a gigantic rock.

The great region of the south, including the Chilian Archipelago, which is divided from the mainland by that important commercial waterway, the Straits of Magellan, is the portion of her territory to which Chile looks for the prosperity of her breeding industry.

The land in this vast zone which can be disposed of by the State for the purpose of colonization amounts, as near as it is possible to calculate, to close upon $10,000,000$ acres. More will be said about this region, and the great facilities and inducements offered by the Chilian Government to colonists, in the commercial section of this chapter. The extreme south and interior of Patagonia are, as yet, almost unexplored ; but along
the coasts small forests are intersected by marshy pampas and bleak plains of undulating grass-lands; here and there large lakes and gulfs, surrounded by swampy meadows, relieve the monotony of the great semi-explored fertile plains, which seem to have been specially designed by nature for the purpose of rearing large flocks of sheep, horses, and cattle.

The climate is cold, and in the south snow covers the ground for many months. Notwithstanding these disadvantageous climatic conditions the population of this southernmost region of the New World is steadily increasing. The rosy cheeks and hardy appearance of the coming citizens of Patagonia at once impress the traveller in these lonely regions. They present a strong contrast to the inhabitants of Northern Chile; for while on the nitrate fields one sees the pale face and deep-set eyes, characteristic of the tropics, on the pampas of Patagonia the red cheeks, often accompanied by fair hair, remind one unmistakably of Sweden and Norway.

Chile presents unique topographical features. To the east the Cordillera of the Andes rises like a gigantic barrier from earth to sky ; and on the coast, to the west, stands the smaller advance guard, the Western Cordillera, as if challenging the mighty Pacific to an encounter. Between these two chains of mountains runs the long central valley.

Rivers, streams, and valleys intersect the Western Cordillera ; and rushing torrents, fed from the eternal snows on the lofty peaks of the Andes, traverse the wild and impenetrable regions of the Andean range, watering the fertile plains of the central valley, and forming navigable outlets to the coast.

The northern portion of this longitudinal plain is
occupied by the nitrate fields of Tarapacá ; next comes the desert of Atacama-nature's waste groundupon which rain seldom falls.

To the immediate south of this lies the mineral zone, where gold, silver, and copper abound in large quantities. Here the central plain is broken by low Cordillera. Then come the fertile plains of the central interior, upon which the inhabitants of Chile rely for the necessities of life. The extreme south is composed of Patagonia, already described.

## THE NITRATE FIELDS

In the north, on the nitrate fields, which are principally owned by British and American companies, the life somewhat resembles that on the gold fields of California in the Forties. There are the central "oficinas," or houses of the local administration, and the stores where the nitrate diggers change the tokens given them in payment for labour, either for money, which it is often necessary to ride miles to spend, or for the many small necessities of human existence. The houses of the administrative staff, small wooden bungalows built upon rock, surround these central works. Here, on these wild plains, dependent even for food upon the connecting nitrate railways, live Englishwomen, the plucky wives and daughters of those who man these outposts of British industry. All around stretches the arid waste of rock, with its beds of nitrate, sometimes concealed beneath the surface, and at others exposed to the rays of the scorching sun. Far over these "fields" stretch the outlying camps which, like tributaries of a main river, supply the nitrate to the central refining works.

Dug in these lonely, burning, and thirsty regions, this valuable fertilizer is sent down by the nitrate railways to the coast, shipped in cases carefully shielded from wet, and exported to all parts of the world.

## EASTER ISLAND

Several islands are included in the northern province of Atacama, among them being San Felix and San Ambrosio, which lie some 370 miles from the mainland, and the small uncultivated islands of Salas and Gomez. The most important, however, is Pascua, or Easter Island, which is over 2,000 miles from the coast. A visit to this lonely isle, far out upon the broad Pacific, entails great difficulty, and few attempt it for pleasure.

The black inhabitants, who are of a very religious disposition, may be seen to advantage when going to worship, some dressed in discoloured and dirty uniforms of naval officers, others in the discarded clothes of ordinary seamen ; while in not a few cases it would puzzle the most experienced traveller to say what rank or nationality their ludicrous garments, which are composed of gleanings from the sea, represent.

The ground rises from the seashore until it forms two gigantic cones, the craters of extinct volcanoes. These the dwellers on Easter Island use as reservoirs, which are naturally filled during the rainy season, and supply water when the land is scorched by the tropical sun. A notable sight are the ancient idols on the slopes of Pascua Island. These colossal stone images stand at various angles, and some are nearly fifteen feet high. They are relics of a prehistoric civilization, as to which absolutely nothing is known.

Some few years ago this island was for hire. The Chilian Government offered to lease it for a long term for the purpose of cultivation or breeding, and a London firm entered into a contract to rent a portion of the island. The other part still remains " to let."

## CLIMATE

In Chile nearly every variety of climate is experienced, from the temperature and conditions of the torrid zone to those in the regions of perpetual snow. The climate varies according to the latitude, and also according to the longitude. In the north, near the coast, it is hot and dry ; in the central valley it is often very hot, and rain seldom falls; but for each thousand feet of ascent towards the snow-capped summits of the Andes, the temperature drops several degrees, and rain becomes more frequent. The central zone is a temperate clime. In winter rain is regular, and the temperature in summer averages $70^{\circ}$ Fahr., while in winter it drops to $54^{\circ}$ Fahr. This region is well irrigated, and many rivers intersect the broad valleys. Here the vine flourishes, and wines are made from the grape almost equal to those of Portugal. Raisins and many sub-tropical fruits abound.

Further south the temperature slightly decreases, but vegetation is luxurious. The slopes of the Cordillera are covered with forests, and the valleys yield splendid crops of corn and barley. Among the many trees which cover the sides of the mountains are cyprus, oak, coihue, espino, and larch. Sport with the gun is almost entirely restricted to the heights of the Sierra and the slopes of the Andes.

The chief characteristics of the extreme south are
wind, rain, and snow. This region, which abounds in virgin forests and virgin soil, and is so admirably adapted for breeding purposes, is cool in summer and very cold in winter. Snow covers the ground for many months, when the temperature drops considerably below zero.

In many portions of the country there is great variation in temperature between sunrise and sunset. This is especially noticeable on the heights of the Andes. The maximum temperature in Santiago, the capital of Chile, during the summer months can be reckoned as $90^{\circ}$ Fahr. In winter it drops considerably, and snow sometimes falls, but it never remains for many hours, and disappears as the sun rises.
In Valparaiso $68^{\circ}$ Fahr. in summer and $54^{\circ}$ Fahr. in winter is about the average. In the northern town of Iquique the maximum summer temperature is about $80^{\circ}$ Fahr., and in winter it only drops to $60^{\circ}$ Fahr. The prevailing wind, which however varies in the different regions, is during the summer months south-west. This antarctic sea-breeze tempers the almost tropical heat of the day. During the winter months, the northwest winds blow from the Pacific.

It is interesting to inhabitants of countries north of the equator to note that in the southern regions the north winds, coming from the tropics, are the warm breezes, while the south winds come from the antarctic ice south of the "Horn."

In Patagonia the Polar winds sweep across the pampas, through the virgin forests, and over the low Cordillera. The usual strength of the wind at Punta Arenas is, however, only a light sea-breeze coming from the Antarctic ; but on the coasts this often rises to a great velocity, well known to navigators round the Horn.

In the northern and central zones of Chile the mornings are usually very fine, and scarcely a breath of wind disturbs the semi-tropical vegetation, while shortly after midday a strong sea-breeze rises and dies away again at sunset.

## GOVERNMENT AND PEOPLE

The government of Chile is like that of all the other South American Republics, representative and democratic, there being three separate powers, the legislative, the executive, and the judicial.
The Chilians are very courteous and hospitable to strangers. Englishmen, or Europeans generally, no matter what their social position was in the "Old Country," are treated with great respect, and are admitted to the various clubs and societies throughout the land. Chilians are, however, an excitable and hasty race, and great diplomacy and finesse should be exercised by foreigners when deating with public affairs.

## CHIEF TOWNS

The capital of the Republic is Santiago, which was founded on the 12th of February, 1541, by Don Pedro de Valdivia, a Spanish adventurer, who conquered Chile from the Araucanian Indians, and annexed it as a province of the Spanish Dominion in the New World.

The city stands upon a fertile plain at the mouth of the great longitudinal valley ; it is raised several hundred feet above sea-level, and is backed by a semicircle of mountain peaks. The population exceeds 410,000 .

The river Mapocho, which runs through the centre of the city, divides it into two portions. The streets are broad, and the buildings bold and spacious. The water is supplied from natural springs in the Cordillera of the Andes. There is a good service of electric tramways, which not only connect all parts of the city, but run far into the suburbs.

Among the many magnificent public buildings in Santiago is the Palace of the Monedu, in which is the residence of the President of the Republic, and the Offices of State. The reception hall of this fine specimen of architecture is well worth a visit. It is a spacious oblong apartment, with large mirrors and decorated recesses round the walls. Heavy chandeliers hang from the carved ceiling ; and small tables, and quaint chairs, and many fine bronzes, speak of antiquity and of Old Spain.

The Congress Hall, another splendid building, the chambers of which have two circles, supported by columns, with the seats of the Deputies arranged in raised tiers, in the body of the hall, is one of the sights of Santiago.

The cathedral, the municipal theatre, the military school, and the university, are all fine buildings of modern architecture.

In the cool of the evening all the élite of Santiago may be seen promenading or lounging under the semitropical trees in the forestral park of the Mapock, or driving along the Alameda; while English and European travellers, new to the city, mount to the top of Santa Lucia Hill to see the magnificent effect of the brilliant moonshine on the surrounding country, which stretches to the Pacific on the one hand, and to the Andes
on the other. The scene brings to mind Rudyard Kipling's famous poem, " A Campfire Reverie" :

> Rivers by night that clack and jeer, Plains that the moonshine turns to sea, Mountains that never let you near And stars to all Eternity.

Valparatso, the chief port of the Republic of Chile, is another fine city, and is really the most important commercial centre of the country. The surrounding towns, many of which are connected by tramways, or railways, are typical South American townships, and are much frequented in summer owing to the mild climate and pretty country. The principal of these are San Francisco de Limache, in which is situated an important brewery ; El Salo, and Vina del Mar, which are mostly summer resorts.

Another magnificent city is Concepcion, which contains three fine buildings, the hospital, the cathedral, and the Palace of Justice. In this province coal mining and agricultural pursuits form the principal industries.

At Lota in the same province stands the famous Cousiño Palace, the residence of the late Madame Cousiño, a rich South American lady of much influence and well known in European society.

These are the principal cities in the central region.
In the northern provinces the chief town is San Pedro de Tacna, the capital of the province of the same name.

In the nitrate and mineral region are the ports Iquique, from which many thousand tons of nitrate, iodine, and copper ore are exported annually, Antofagasta, Tocopilla, and Taltal. The latter of these is the residential quarter of the administration of
the railways, nitrate, and allied industries. From Coquimbo, another important northern port, large quantities of silver ore and specie are exported to Europe and the United States.

In Chilian Patagonia, the chief commercial centre is Valdivia, from which wheat and leather are the principal exports.

The southernmost port in the world is Punta Arenas, in Antarctic Chile. From this town, which is the centre of the cattle-breeding and sheep-farming of the country, there is but one practical means of exit-the sea. History records it as a penal settlement, the Siberia of South America. To attempt to leave Punta Arenas by land, without escort or provisions on an expeditionary scale, would mean starvation on the wind-swept pampas of Patagonia. Placer mining is carried on, and many companies and private prospectors are seeking for the stores of valuable metal which are known to exist in this frozen region. The bright specks of gold mixed with the sand of the river beds tell of a hidden Eldoradoa Klondyke of the south.

## TELEGRAPHS

The principal telegraph system forms an important industry of the State, which owns nearly twenty thousand kilometres of telegraph wires, with nine hundred receiving apparatus. Nearly all the cities and towns of the Republic are connected by wire. The private lines are mostly owned by the various railway companies; an exception being the American Telegraph Company, which has over a thousand kilometres of wires.

By an international telegraph convention with the

Republic of Argentina the wires of the two countries have been connected. A similar arrangement has now been made with Bolivia.

Cables for Europe or the United States may be despatched either via Argentina or by the West Coast Telegraph Company or by the Central Telegraph Company. There are nearly a thousand post offices already established all over the country; and all but the thinly populated, or inaccessible regions, are within reliable and rapid postal communication for telegrams and letters. There are wireless stations at Punta Arenas, Puerto Montt, Valdivia, Valparaiso, Coquimbo, Antofagasta, and Arica, as well as a station on the Juan Fernandez Islands.

## PORTS AND INTERNATIONAL COMMERCE

The long coast line, and the proximity of all the commercial centres to the various important ports, greatly facilitate international commerce.

There are no less than sixteen different ports open to ocean trade ; and the defence of home waters is well secured by the Chilian navy, which is one of the most powerful of any belonging to South American republics, and is certainly a credit to the country whose money supplied it.
The Pacific Steam Navigation Company's first steamers arrived at Valparaiso in 1840; they were the "Chile" and "Peru" of only 700 tons burden. This was the dawn of a new era in Chile, for it was that line of steamers which gave the Republic the first European commercial impetus which made her what she is-one of the richest and most advanced of the South American republics.

## VI

## THE REPUBLIC OF CHILE

## COMMERCIAL SECTION

Railways. Mileage in operation. Cost of trans-Andean and longitudinal systems. Railway concessions. Foreign commerce. Relative positions of Great Britain and the United States. Total oversea trade. Principal imports and exports. Currency weights, measures. Conversion law. Nitrate fields and industries. Iodine, borax and salt. Mining. Mineral regions. Coal. Colonization. Immigration laws. Sales of Government land. New industries.

## RAILWAYS

Chile, if compared with many of the other South American countries is well connected, both internally and externally, by railways. The total length of the lines in operation is approximately 8,000 miles. There are three international or trans-Andean systems linking Chile with Argentina and Bolivia. These continental trunk lines run as follows: (1) Valparaiso, Los Andes (crossing Andes) to Juncal, Mendoza (Argentina), and Buenos Aires, a total distance of about 1,300 miles. (2) Antofagasta Ollagüe (crossing Andes), Oruro (Bolivia) and La Paz, 575 miles. (3) Arica, Tacna, (crossing Andes at altitude of 15,000 feet) to La Paz 400 miles. They are all railways of extraordinary engineering skill and afford to passengers some wonderful scenes of Andean grandeur.

The principal lines of internal communication form what is known as the Longitudinal System, which is divided into a northern and a southern section having a combined length of 1,400 miles. This system traverses the great longitudinal valley at the foot of the Cordillera of the Andes, and serves the principal agricultural and commercial regions of the State. These lines join Santiago, the capital of Chile, with Valparaiso the chief port, and connect all the important towns of the central portion of the country, linking up the internal railways with the main transcontinental line from Valparaiso to Buenos Aires.

The cost of the longitudinal system was approximately 12 millions sterling. The construction of railway lines in all except the northern desert region of Chile has necessitated the erection of many fine bridges to span the ravines and rivers which cross their course. Perhaps one of the most remarkable of these is the bridge crossing the Malleco river. This triumph of engineering skill is 1,400 feet long and more than 300 feet above the river bed. It cost over a million dollars to construct. Among the many other notable bridges on the Chilian railways are those over the Maipo, the Bio-Bio, and the Maule rivers.

In the northern region the principal railways are those connecting the different "Oficinas" or nitrate refining works. The total number of lines in this region is fourteen, and they are mostly owned by the nitrate and nitrate-railway companies. There are, however, the trans-Andean trunk lines from Arica and Antofagasta to Bolivia and the connecting lines of the northern section of the Longitudinal System.

The line from Caldera to Copiapó was the first railway
constructed in South America. It was built in the year 1851 by the order of Mr. William Weelwright, an American citizen, who realized the many and profitable openings for railways in the southern Continent.

The great difficulty in the construction and maintenance of lines in the north is the scarcity of water and the difficulties of supplying the various outlying stations with necessities.

The territory lying to the south of Santiago, the capital, is served by the southern section of the Longitudinal System, comprising 600 miles of lines already in operation. The railways in this temperate region, which is essentially suitable for European colonization, extend as far south as Valdivia, the port for Southern Chile, Osorno, and Callbuco on the Gulf of Ancud. Beyond this lies that vast and almost uninhabited region known as Antarctic Chile, into which railways have not at present penetrated; and in view of the scanty population and the absence of industries, other than those of gold-washing, and cattle and sheep-breeding, there is small scope for railway enterprise. Moreover the nature of the country and the climatic conditions would place formidable engineering difficulties in the way of the construction of a line of any considerable length. The solid land is divided by broad and deep channels, rivers, gulfs, and marshy pampas; and for many months in the year the ground is under deep snow.

The only railway line in Antarctic Chile runs, for a distance of four and a half miles, from the Loreto coal mine to the port of Punta Arenas, on the Straits of Magellan.

The lines through the most thinly populated and undeveloped districts have been left to the State to
construct ; but private enterprise has built most of the railways in the important nitrate, mining, agricultural and commercial districts. The State owned railways have a total length of just over 5,000 miles, the remaining mileage is both owned and operated by private companies many of whom are registered in Great Britain. The success which these lines have attained has induced capitalists to commence the construction of many other lines and branches of the trunk systems. Each year sees additions to the network of iron roads which now cover all the important and populated districts of central and northern Chile.

The following table, although not a complete list of the lines in operation, will give some idea of the principal sections of the different railways in the three inhabited regions of the Republic (including Antarctic Chile).

## Northern Region.

Arica to Tacna.
and La Paz, Bolivia.
Antofagasta to Ollagüe.
Oruro and La Paz, Bolivia.
Caleta Buena to Agua Santa.
Caleta Coloso to Agua Blancas.
Caldera to Copiapó and district.
Cerro Cordo to Challacollo.
Chañaral to Pueblo Hundido.
Coquimbo to Tongoy.
Huasco to Vallenar.
Iquique to Pisagua.
Junin to Oficina a Carolina (nitrate works).
Taltal to Cachinal de la Sierra.
Tocopilla to Toco.
Northern Section, Longitudinal System, connecting with Valparaiso and Santiago.

## Central Region.

Valparaiso to Los Andes.


Southern Region.
Valdivia to Santiago and Valparaiso (by Southern Section of Longitudinal Railway).
,, Callbuco.
„ Osorno.
Collileufu to Perihuaico.
Pitrufquen to Valdivia.

| Antilhue. |
| :--- |
| Antilhue to Valdivia. |
| Punta Arenas to Loreto (coal mines). |

The opening of the Trans-Andean Systems places Chile in railway communication with the capitals of Argentina (direct), Paraguay, Uruguay, and Brazil (indirect), Bolivia (direct), and Peru (indirect).

Railway Concessions.-Railway lines being the principal channels for inland commerce, all forms of industry carried on at a distance from the sea-coast or navigable rivers are, more or less, dependent for success upon iron roads. The Governments of growing States are gener-
ally inclined to look most favourably upon railway enterprises.

The construction of railway lines in South America, when carried out and administered by forethought and prudence, has invariably proved not only successful from a promoter's point of view, but a highly remunerative form of investment.

The rapidity of a country's growth greatly depends upon the modes of rapid transit; and the income of many railway companies, whose lines run through sparsely populated districts, has been greatly augmented by subsidiary companies formed for the exploitation of the surrounding lands, which the railway administration in London, New York, or elsewhere has been able to influence.

All these points are not only considered by directors or promoters, but by the Government through whose country the lines are to run. For this, and many other reasons, political, strategic, and commercial, bona fide applicants for railway concessions usually meet with success in whatever country they may seek them.

The Republic of Chile has been much favoured by the influx of foreign capital for the purpose of railway construction; and the country is now traversed by more railway lines than any other South American republic with the exception of Argentina and Brazil.

As has already been shown, a fairly close network of lines extends over the whole of the north and centre of the country, and the privileges conferred on the various concessionaires, combined with the opposition of several existing companies, would prevent the construction of new lines in certain parts.

Taking all these points into consideration, however, Chile still offers a magnificent field for the opening of new and valuable lines. When it is pointed out that there are really but a few thousand kilometres of railway lines in the 290,000 square miles of territory which constitute the Republic of Chile-a country with four million inhabitants, in nearly every district of which valuable industries are already in existence-it will be readily seen what a vast opening still remains for railways and subsidiary enterprises.

During the construction of the Antofagasta and Ollaguie Railway it was found imperative to build an aqueduct, over three hundred kilometres in length, for the purpose of supplying water to the locomotives. The Government, to assist the railway company in showing an adequate return for this great outlay, granted the privilege of supplying the important town of Antofagasta with drinking water. Both the railway and the waterworks have realized the expectations of the enterprising promoters and investors.

Another instance of the success of subsidiary companies, or, in this case, of subsidiary railway lines to industries, is given in the northern region, where the nitrate companies are the principal supporters of the nitrate railways, which, of course, also act as ordinary passenger lines.

In the Republic of Chile the granting of a concession for the construction of a railway line necessitates the passing by Congress of a special law. It is usual, when making an application for a concession, to state the exact route and gauge of the projected line, and the land which it is desired the State should grant for the construction of the main line, branches, sidings, stations,
and other works. It is also necessary to specify if a guarantee upon the capital invested is required.

Upon the granting of the concession a guarantee is demanded by the State.

The plans for the construction of the line must be submitted for the approval of the Government within a specified time, and the line completed in the number of years stated in the concession application paper. The tariff rates must, also, receive the sanction of the State.

The Government reserves the right to purchase the line, within a reasonable number of years, upon a correct valuation by experts. When a guarantee upon the capital invested is granted the ratio of profits is limited to 50 per cent. or 60 per cent. of the gross receipts of the entire undertaking.

Under the laws which regulate the granting of railway concessions in the Republic of Chile, practically all tariffs, rules of transportation, plans for proposed branch lines, subsidiary undertakings, and the other many important questions which vitally affect both the State and the railway company must first be submitted to the Government for approval. Should the construction of the line not be commenced, or completed, within the time stated by the concessionaire in the application paper, the law granting the concession is annulled. This undoubtedly is a wise regulation, as it prevents concessions from being obtained and the works being delayed for several years, or not carried out at all. If such a state of affairs were allowed to exist many valuable concessions would lie idle owing to the apathy or lack of means of the concessionaires, as was originally the case in Peru. Though the openings
for the construction of new lines are numerous, it is impossible to say at any given time in which province the most favourable opportunities are to be sought. Each month sees the addition of a line, or branch, or the granting of a concession. Thus any volume attempting to give an exact idea where lines are required in a country so active in railway construction as Chile, would need constant revision. Where the construction of a single line is a very important matter, it is possible to recommend routes, but not in a country where the needs are constantly being met. A competent man on the spot could see many promising openings for the construction of new lines.

Financial guarantees and diplomacy are the two most necessary things whereby a valuable concession is obtained.

## FOREIGN TRADE

There has been a steady rise in the foreign trade of Chile for many years, and the average annual value now reaches 85 millions sterling, of which about 50 millions is represented by imports. Previous to 1914 about 40 per cent. of the shipping trade was with Great Britain, but during the war period there was a heavy decline. The average annual value of the British imports into Chile during the last few years amounts to $£ 4,000,000$ and the exports from Chile to GreatBritain to $£ 11,000,000$. The United States during the same period imported $£ 23,000,000$ worth of Chilian produce and supplied that country with goods to the value of $£ 9,000,000$. Germany, hitherto third in order of commercial importance, gave place to France, Argentina came fourth, and

Holland took Belgium's place in the fifth rank. It should, however, be remembered that this order of commerce relates to the temporary war-period only, and here, as elsewhere, in this survey of South America, is given with the object of showing the dislocation of international trade during the past five years, and to enable the British public to more or less accurately gauge the amount of lost ground that will have to be made up in the near future if Great Britain is to reoccupy her old and proud commercial position in one of the greatest, rapidly growing, and most profitable markets in the world.

The principal' articles imported, in order of value are : food, minerals including coal, metal and metal manufactures, timber, wood and wooden manufactures, machinery and tools, textiles and dry goods, ready-made clothing, jewellery, and agricultural products.

The principal articles of export, by value, are : nitrate of soda, minerals, animals and animal products, agricultural products, manufactured goods, sylvan produce, chemical produce and iodine.

## COMMERCIAL REGULATIONS

Simplicity characterizes the commercial laws of Chile, and there is a notable absence of restrictions and heavy taxes on ordinary trades and industries. Chile, unlike Brazil, permits coastal navigation and trade to be undertaken by ships of all nations. Printed matter of all kinds is exempt from import duty. Machinery for new manufactures is admitted into the Republic free of duty ; and in many cases public land for factory sites is readily ceded by the Government
or local authorities. On the State Railways a reduction of 30 per cent. on the freight charges has hitherto been allowed to encourage newly established industries.

Up to 1916 there were no special tazes or restrictions on foreign commercial travellers in Chile, but in that year a law was passed imposing an annual tax of 1,000 pesos (about £28) on commercial travellers representing foreign firms with no selling agency in Chile, and the tax was made payable in each department of the country in which business was carried on. Although this tax is nominally in force, it can be evaded by a traveller attaching the name-plate of his firm to an established place of business, and paying for a trading licence which covers business transactions all over the country.

## CURRENCY, WEIGHTS, AND MEASURES

The Chilian monetary system will in future be based on the gold Peso $=18$ d., but there is still a large paper circulation of dollars or pesos of 100 cents. The law to convert the currency from paper to gold was originally passed by the Legislative in February, 1895, and was to have come into operation in 1910, but a year before the change was to finally take place the Legislative postponed the conversion until 1915, and subsequently until 1919-20. Each year the Government set aside certain funds for the redemption of all paper money. The exchange value of the paper peso fluctuated very considerably.

The metric system is used throughout the country for the wholesale and for most of the retail trade, but, in dealings with or between Indians, half-breeds, and in certain small agricultural townships some of the old Spanish measurements are still in use.



COQUIMBO.
A Copper and Nitrate Port on the North Chilian Coast.


VALIDIVA, S. CHILE.
Heabquarters of the Pastoral industry.

## THE NITRATE FIELDS

About twenty miles from the coast, on the plains of Tarapacá, are situated many of the valuable nitrate fields. In this district alone there are several hundred "Oficinas" for refining the "Caliche," or nitrate mixed with earthy impurities. This region is so carefully mapped out and jealously guarded by the various concessionaires, that there is absolutely no room for the new comer, unless an old bed is purchased, which is certainly not advisable unless expert surveys have been made on several previous occasions. The land is equally crowded in the second nitrate zone on the desert of Atacama. This desolate and sun-dried waste includes the provinces of Atacama and Antofagasta. "Oficinas" and their surrounding "camps" cover this region. The rush to the nitrate fields of Chile can be likened in a minor degree to the rush to the goldfields of Klondyke, with the exception that claims "pegged out" or concessions obtained on the nitrate fields were much larger, and the works were backed by powerful companies with almost unlimited capital. There is but little success likely for any new enterprise in the nitrate or its allied industries, unless new fields are discovered, which is still within the range of possibility.

In these districts borax and salt-pools are being worked, and there are good openings for the further developments of these industries.

## MINING

The Andes have long been famous for the rich metals which lie hidden on almost every slope and in almost
every gorge. These vast riches have as yet defied the white prospector, the secret being known only to the descendants of the ancient Incas. The mountains of the coast also contain rich veins of metallic substance. In the Andean Cordillera lead, antimony, copper, and silver are found in large quantities. Veins and alluvial deposits of gold are especially abundant in the Cordillera of Nahuelbuta; and nearly all the rivers and waterways of Chilian Patagonia contain gold.

In the south, on the main islands of Chilian Patagonia, where the Andean Cordillera, although less lofty than in the more northern provinces, stretches to the islands of Cape Horn, gold placer mining is largely carried on, and is frequently attended with great success. The metallic dust which is washed down by the mountain torrents shows clearly that veins exist in the higher regions. Here, undoubtedly, is a splendid field for prospectors, as well as in the gold, silver, and copper zones of the north.

The principal copper mining districts are Tocopilla, Antofagasta, Taltal, Chañaral, San Juan, and El Monado. Silver is known to exist in quantities in the northern provinces of Tarapacá, Atacama, and Coquimbo. Many are the prospectors in the Andes; and the lucky discoverer of a new mine has the right to claim a concession from the Chilian Government.

In the central province of Concepcion coal abounds in great quantities; and valuable mines of both bituminous and anthracite form the principal wealth of this and the surrounding provinces. So rich in coal is this region that railways have been specially constructed in order to better exploit the mines.

Arauco, a province immediately to the south of

Concepcion, is, undoubtedly, one of the richest coal districts in the South American Continent. The coal, which is of good quality, is burned by many steamships, and also used by the Chilian Navy.

The ports of Coronel, Lota, and Libu are the principal coaling stations for small steamers on the Chilian coast ; and the many valuable mines in the close vicinity of these ports make them very important centres.

The port of Lota is owned, almost entirely, by the "Campañia Explotadora da Lota y Coronel," which also exploits the surrounding coal mines and owns several copper-smelting factories.

## COLONIZATION

The administration of State lands, colonization, and immigration, are attended to by the office of the Inspec-tor-General of Lands at Santiago; which in turn is dependent upon the Chilian Foreign Office.

Great and generous efforts have been made by the Republic of Chile to solve the all-important problem of immigration and colonization. In a thinly populated country like the southern territory of the Chilian Republic, where the natural increase of the population is not nearly sufficient to exploit the wealth of the territory, the introduction of a stream of foreign immigration is most important for the development of the State lands, and for the future prosperity of the country.

In the case of countries nearer to Europe little Government inducement is needed to secure foreign immigrants; the special characteristics of these countries are better known, more information is obtainable, and there is not the dread of a long and
uncomfortable sea-voyage. Intending immigrants to the New World look first to the countries they know or have heard most about; and in finally deciding where to settle, they choose the most suitable country which is nearest to their native land. Colonists for South America are nearly all recruited from Spain, Italy, and Central Europe.

The Government of Chile, recognizing the disadvantage at which the country stood in being forty days' voyage from Europe, the climatic conditions of Patagonia and the semi-southern provinces (the largest and best territory for colonization), and also the fact that practically no information was available for inducing immigration, took up the subject of colonization in a manner worthy of an enterprising State.

Immigration agents were appointed in various European centres, and several small foreign colonies were formed at the expense of the Government. Although these proved decidedly successful, the number of immigrants was at first so small that little practical good resulted; but owing to the determined action of the successive governments and their generous efforts, a regular stream of foreign immigration was being established prior to the Great War. The offer of the Government of the Republic of Chile to colonists is as follows:

To the immigrant the Government offers to pay the passage money from Europe to a Chilian port; and upon arrival in the Republic, free transportation to a colony or district, where a concession of 94 acres of land will be given to the immigrants, and an additional 44 acres for each son over ten years of age.

Financial help at the rate of $\$ 0.30$ a day for each adult, and $\$ 0.15$ for every male child, will be allowed from the time of arrival in the Republic until the day of settlement in the colony.

The Government will then supply immigrants, gratuitously, with a cart, a yoke of oxen, 150 boards, and 25 kilograms of nails, for the purpose of erecting a temporary bungalow. Even at this stage the colonists will not be left to their own resources, which is, unfortunately, so often the case in foreign lands, the result frequently being semi-starvation for the immigrant and his family until after the first crop. The Government lends $\$ 20$ (Chilian) per month to the head of each family during the first year, and supplies medical attendance, and medicine where necessary, free during the first two years.

In return for these liberal concessions the Government requires the colonist to agree to four obligations. He must establish himself upon the land which has been given free by the State ; he must cultivate it for at least six years; he must refund to the Government, during the six years, without interest, all the passage money and advances made ; and he must pay for all implements supplied.

These obligations, which are spread over a period of six years, should not cause any financial embarrassment to colonists. They are imposed by the Government so that the money coming in from the immigrants already successfully established can be used for the continuance of the work of colonization.

To financiers of colonization, the Chilian Government offers the following concessions in place of the grant conceded to private immigrants:

Three hundred and forty-six acres of land for each colonist, and 183 for each son above ten years of age, a horse, a cow, a sheep, a pig, three fowls, and a substantially constructed house in the place of boards and nails as given to the private immigrants, a saw mill, and carpenters' tools for each colony, and land for the construction of a small town.
The colony-maker must enter into a contract with the Government to refund all money advanced, and to pay for all implements given to the colonists, in six yearly instalments, also to introduce the number of colonists stated in the contract ; and to guarantee their residence in the colony for five years.

Many very successful colonization schemes have been established on these lines in many parts of South America, the contractors superintending everything, and charging the colonists a fixed sum in advance, and the balance in yearly instalments.

The other clauses in the Government's colonization scheme relate to Chilian citizens who, upon becoming colonists, receive a free grant of 120 acres of land, with an additional 50 acres for each son. In a mountainous district 200 acres instead of 150 is frequently granted. The most suitable provinces for the establishment of foreign colonies are Chiloe, Cautin, Llanguihué, Malleco, and Valdivia.

Industrial immigrants from South Europe or the United States can obtain the following concessions from the Chilian Government :

Adults : 3rd class sea passage to Chile, $\$ 20$ American gold. ${ }^{1}$

[^5]
## Children between 8 years and $12, \$ 10$.

 under 8 years of age, $\$ 5$.Adults: 2nd class passage, $\$ 100$.
Children in same proportion as above.
Two tons of tools or machinery will be allowed free for each family, with transportation for the immigrant and his baggage from port of arrival to any part of Chile. In addition to this, eight days' board and lodgings in the immigrants' hotel at Talcahuaco will be granted.
To specialists bringing machinery for the establishment of new or undeveloped industries, entirely free sea and land transport will be granted by the Chilian Government. No land will be ceded to foreign colonists in the territory of the Magellans.
Large plots of land, the property of the State, suitable for colonists with capital, or companies requiring large breeding estancias, are sold, mostly in plots of 500 hectares, by public auction.

To bid at these Government auctions, a deposit note for a sum amounting to the value of the land, as previously determined by the State surveyors, must be presented. The purchaser of a plot pays one-third of the price immediately, and the remainder in ten yearly instalments. The only obligations imposed are that the land be fenced in within three years, and that the necessary space for the construction of public roads and railway lines-the latter not to exceed fifteen metres wide-shall be freely granted by the owner.

The temperate climate of the colonization zone is one of the chief factors for the inducement of immigration. The soil is extremely fertile, and all the central and southern provinces of temperate Chile are well
suited to agriculture. In the extreme south, in Antarctic Chile, the wide tracts of pampas are very suitable for breeding purposes.

The Montaña, or forest region of the country, is principally confined to the lower western ridges of the Andes. Trees cover the slopes to an altitude of many hundred feet, above which lie the mountainous ridges leading up to perpetual snows.

In Chilian Patagonia virgin forests abound, and few more dismal sights can be imagined than a winter scene in their silent depths.

An important industry, which is likely to have a very rapid growth, has recently been opened up by the discovery of large salt-water pools near Paralones and Vichuguer. These are being worked industrially for the extraction of common salt. Among the many small industries of the Republic may be mentioned the catching and killing of seals and sea otters in the territory of the Magellans. Hides and furs are at present the principal exports of this region. The Government, however, has placed certain restrictions upon the killing of otters, seals, and sea lions, so that the further development of this industry is unlikely.

## VII

## THE REPUBLIC OF PERU

## GENERAL DESCRIPTION

The Republic of Peru is situated on the west coast of South America, and is bounded on the north by Ecuador, on the north-east by Colombia, on the east by the United States of Brazil and the Republic of Bolivia, and on the south by Chile. The 1,300 miles of western frontier are washed by the Pacific Ocean.

Peru, which has an area of about 700,000 square miles, is essentially a maritime State. The largest portion of the white inhabitants live in the coast region, and the bulk of the commerce of the country is carried by steamship. The population of this vast and naturally very rich country is approximately $4,600,000$; of these about 800,000 are native Indians, the descendants of the Incas, who, before the advent of the Spanish adventurer, had won by conquest, and held dominion over, the whole of Central South America. The ruins of their great stone palaces, temples, and irrigation works, may still be seen in the Department of Cuzco.

The Republic is divided for political purposes into twenty-two Departments and Littoral Provinces, the names of which can be seen on the accompanying map.

Topographically Peru is divided into three well defined zones, viz., the Coast Region, the Andean Range, and the Forest Region. The most important of these, from a commercial point of view, is the Coast Region, which extends from the Cordillera of the Andes to the Pacific Ocean. It varies in width from twenty to one hundred and fifty miles, and is composed of fertile valleys divided here and there by large arid plains. The climate is hot, but not unhealthy. On the coast rain seldom falls, but refreshing dews moisten the ground and atmosphere at night. The principal industries of this portion of the country are sugar and cotton growing, and cattle raising, while in the fertile valleys large vineyards flourish, from which wines almost equal to those of Spain are produced.

The Montaña, or Forest Region, which, although little exploited, is by far the richest zone in all Peru, occupies about two-thirds of the whole Republic, and is composed of immense tropical forests, in many parts of which the feet of white men have never trod. In this region, beneath the luxuriant vegetation, gold, silver, copper, tin, mercury, lead, and coal exist in large quantities. In the rivers which traverse this extremely fertile but uninhabited land, bright specks of gold can sometimes be distinctly seen in the sandy beds beneath the clear waters. Thousands of rubber-bearing trees grow in the dense forests; and on the plains, both in the north and south, cocoa and coffee trees flourish.

The region of the Andes has long been noted for its great mineral wealth. In the time of the Spanish dominion the silver mines of Peru are calculated to have produced $£ 40,000,000$ worth of silver in ten years. Now, however, owing principally to lack of proper
roads, capital, and enterprise, the output has dropped very considerably, but several departments are known to be immensely rich in this precious metal. Perhaps the most notable silver-producing district is that of Yauli, where there is one vein alone which is likely to rival the celebrated Potosi mines of the Spanish period. During recent years copper has largely taken the place of silver, and is now produced to the average annual value of 6 millions sterling.

This mountainous region contains some of the finest scenery in the world. From the passes leading up to the snow-line one may gaze over square leagues of dense tropical forest and swamp, with here and there the bright streak of a river wending its way towards the coast Sierra, and the great rugged peaks of the Andes stretching on either hand, awe-inspiring, but grand.
The River Amazon, called by the Peruvians " Marañon," which crosses almost the entire continent of South America, cuts through the northern territory of Peru. The valley of this fine waterway is one of the most fertile spots on the globe, for in this well-watered tropical region the maximum point of vegetation is reached. The prolific growth, not content with covering the banks and adjacent land for hundreds of square miles, in many parts almost blocks the passage of the river with overhanging trees and floating vegetation.
Words cannot describe the beauty unfolded by every turn and twist of this great river from the moment of its rise in Peruvian territory to its mouth on the Brazilian Atlantic coast. Unless one has seen the exuberant growth and vivid lights and shades of the tropics, such a scene as that presented in the valley of the Amazon cannot be accurately imagined.

The staple product of the vast interior of Northern Peru is rubber, and every year sees an increase in the trade and foreign commerce of the whole of Amazonia. The export of rubber averages in annual value $\frac{3}{4}$ million sterling. The time will come when ships from every civilized nation of the world will steam up this magnificent river for the purpose of exporting the natural riches of the limitless forests.

## CLIMATE

The climate of Peru varies greatly in the three different zones; along the coast the average temperature is about $66^{\circ}$ Fahr., the thermometer seldom rising above $75^{\circ}$ Fahr. On the Sierra the air is considerably cooler, and $55^{\circ}$ Fahr. may be taken as the average, although on the heights of the Andes frost and snow cover the ground for many months in the year. In the Montaña, however, the atmosphere is hot and damp, and at Iquitos, on the Amazon, the mean temperature is about $75^{\circ}$ to $80^{\circ}$ Fahr.

Although Peru is situated completely in the torrid zone, a great portion of this highly fertile country is singularly free from the numerous epidemics and diseases which usually prevail in this central region.

Sir Clements Markham, writing about the Sierra region, says: "From Cerro de Pasco there is a considerable descent southwards to the city of Jauja, the climate of which is said to be almost perfect for patients suffering from pulmonary complaints. It is a charming Sierra town, beautifully situated in an amphitheatre of mountains clothed to their summits with waving fields of barley. The climate is delightful."

In the forest region there are two seasons, the " dry" and "wet," the first of which commences in May and ends about October, while the wet season lasts from November to April. On the Punas, or heights of the Sierra, the atmosphere is as cold and fresh as in the north of Scotland.

The climate of the valley of the Amazon is both hot and damp, and it is necessary, as in all tropical countries, to observe closely all the laws of hygiene, and to take precautions against attacks of ague, malaria, and a disease known as the black vomit, which is very much like yellow fever. It must not, however, be imagined from this that there is a great risk to health by voyaging on the Amazon, or that there is more danger than the traveller is exposed to in any other tropical country, for this is not the case. Once the river or railway is left, however, and the vast equatorial forests which stretch away on either hand are entered, one must be prepared to undertake feats of exploration in little known and vast lone lands. So thick and impenetrable are the forests of Amazonia that many glades are dark even when the sun is at meridian, and the traveller feels as though he had been lowered into a huge pit of gorgeous tropical growth.

## CHIEF TOWNS

The fine capital of the Republic of Peru is the city of Lima, which is built on a plateau elevated some 500 feet above sea level, and has a population of nearly 150,000 . The state of culture in this, the chief city of the country, is far more advanced than is generally supposed, and owing to the proverbial hospitality of
the Peruvians strangers can enjoy the most cultured society.
Lima is constantly being improved by the addition of parks, avenues, and magnificent public buildings. Electric tramways traverse the city in all directions, and a line runs to the Port of Callao, and thence to the neighbouring bathing resorts of La Punta and Chorrillos.

Within recent years a new theatre, costing over fifty thousand pounds, has been built; and another far larger and more costly has recently been completed. The comparatively new Government Palace is also a fine structure. The streets and broad avenues are all well paved and the sanitary system is good.

The suburbs of Lima are, undoubtedly, very pretty. Many fine mansions nestle in the prolific growth of the tropics. A short journey of four miles brings the visitor to the seaside town of Magdalena-del-Mar, a small but pretty watering-place on the Pacific Ocean. Here, during the season, military bands play daily, and various forms of amusement are provided for the many holiday makers who frequent this little-known and far-off watering-place.
The seaside towns of Miraflores and Barranco are also within easy reach of the capital.
Lima is the terminus of the Oroya, or Trans-Andean railway line, which passes through some of the most magnificent scenery in the world. This line, the construction of which was a noteworthy feat of engineering, crosses the Andes at an altitude of 15,642 feet, passing through the country of the ancient Incas to the rich mines of Cerro de Pasco, and terminating at a point on a navigable tributary of the Ucayali River which affords fluvial communication with the Amazon.

Another town of great importance is Callao, which is the chief port of Peru. It is situated in a large and sheltered bay on the Pacific coast, a distance by railway of about ten miles from Lima, and has a population of nearly 50,000 . The docks, which were built at a cost of two millions sterling, allow the largest steamships to lie alongside the quays. There is also a large floating dock which is capable of taking vessels up to five thousand tons.

No less than five steamship companies have daily departures for all the Pacific ports and also to Europe. In addition to this the small coasting vessels entering and leaving this harbour are very numerous.

The chief ports of the Republic, going north, are as follows: Mollendo, Pisco, Callao, Salaverry, Pacasmayo, Eten, and Paita.

The small inland towns of the Republic are far too numerous to mention here, but the principal are Arequipa $(48,000)$ and Cuzco $(30,000)$. Iquitos, an important port on the Amazon, owing to its unique position and ever-increasing trade, is worthy of note. This comparatively small town is situated in the extreme north-east of Peru, some miles from the Brazilian frontier. It is in the very heart of Equatoria, cut off from civilization by over a thousand miles of immensely fertile but unpopulated land. It is, however, linked with the outer world by the Amazon river, which, from its delta on the Atlantic, is navigable for ocean liners for over 3,500 miles through the heart of the Continent to this small Peruvian port. Before very long, Iquitos will also be joined by railway with the Pacific coast, and travellers to the west coast of South America will then have the option of going from

Liverpool to Iquitos and then to the Pacific coast by railway. Although this route will save but little in the way of time, the traveller going via the Amazon will be afforded some of the most magnificent tropical and mountain scenery in the world. The voyage up the river, then over the Cordillera of the Andes, and down through the vast plains of Peru to the Pacific Ocean will afford scenes of beauty and grandeur which can be equalled by no country in the world.

## GOVERNMENT, ETC.

The system of Government in Peru is representative and democratic, there being three separate powers, the Legislative, the Executive, and Judicial. The first of these three is vested in a Senate and House of Representatives; the Executive consists of the President of the Republic, assisted by a Cabinet of Ministers ; and the Judicial power is vested in a supreme court and nine superior courts.

The Republic of Peru has a well organized postal service, and is a signatory to the Universal Postal Union. There is also a good telegraph system connecting all the important cities and ports of the Republic, and many towns have good telephone services.

The people of Peru are exceptionally courteous, and their unbounded hospitality, both to their employees and visitors, at once goes straight to the heart of " strangers in a foreign land."

Foreigners may acquire territorial property under exactly the same conditions as the Peruvian citizen, and legal property of all description is inviolable.



## PAsEO COLON, LIMA.

(By permission of the Peruvian Corporation.)

The State guarantees the existence and diffusion of free primary education for the sciences and arts.

Peru is essentially a country for the English. Nearly all the important railways and public works have been constructed by British engineers and capital.

## VIII

## THE REPUBLIC OF PERU

## COMMERCIAL SECTION

Railways. Trans-Andean lines. Peruvian Corporation. Railway mileage. River navigation. Railway concessions. Light Railways. Navigation of Amazon and tributaries. Foreign commerce. Commercial supremacy of the United States. British trade with Peru. Growing trade of British Dominions. Principal Imports. Principal Exports. Special commercial laws. The medicinal code. Licences for archæological exploration. Openings for factories. Currency, weights, measures and postage. Mineral wealth. Principal mining regions. Value of mineral output. Mining concessions. Mining tax and laws. Copper, coal, and petroleum. Irrigation of waste lands. Irrigation concessions. Industries. Sugar and cotton. Cost of working a coffee plantation. Guano deposits. Rubber estates and concessions. Taxes on Rubber lands. Export of Rubber.

## RAILWAYS AND NAVIGABLE RIVERS

The trade of Peru, although steadily on the increase, is not yet nearly in accord with the vast possibilities afforded by the natural richness of the soil, combined with the geographical position of the country-especially since the opening of the Panama Canal-and the slow but steady increase in the population. The four main reasons for this are, the lack of railway communication between the coast and the interior, the want of skilled labour, the civil strife of recent years and the natural setback of all countries during the past five years of world war,
owing, in the case of the South American countries, to their inability to obtain adequate supplies of machinery and manufactures in return for their raw materials, and the stoppage of the hitherto steady stream of foreign investments. The two latter drawbacks have, in the case of Peru, been only partially made good by increased commerce with and finance from the United States.

The eighteen hundred odd miles of railway at present in operation are totally inadequate to serve the 700,000 square miles of immensely rich territory comprising this Republic, and the Government is making every endeavour to promote the construction of new lines connecting the more important interior towns with the coast ports. The openings for the construction of railways in Peru, are as many, and as financially sound, as those offered by any State in South America, but there are, already in this country, a number of British as well as American railway experts. About 70 per cent of the existing railway mileage is operated by the Peruvian Corporation, which also owns river steamers and a service on Lake Titicaca. The Mollendo and La Paz (Bolivia) Railway belongs to this important and ably managed company. The time occupied in the journey from the Peruvian Pacific port of Mollendo to the commercial capital of Bolivia is only forty-eight hours.

The railway system of Peru, in operation at the present time, may be seen in the following table, but, owing to the steady increase in the mileage of the different lines it would only be misleading to give the length of maderoad in each case. The distances from point to point are, however, shown on accompanying map.

Railmay. Departments crossed.
$\left.\begin{array}{lc}\text { Central of Peru - } & \text { Lima and Junin. Main line crossing } \\ \text { the Andes. }\end{array}\right\}$

Paita to Piura and Catacos Piura (North Peruvian littoral).
Pimental to Chiclayo - Lambayeque (North Peruvian littoral).
Eten to Ferrenafe and
Patapo - - Lambayeque (North Peruvian littoral).
Pacasmayo to Guadalupe Libertad (North Peruvian littoral). Salaverry to Trujillo and
Ascope - - Libertad (North Peruvian littoral).
Huanchaco to Tres Palos Libertad (North Peruvian littoral).
Chimbote to Suchiman - Ancachs (longitudinal valley Western Cordillera).
Callao, Lima and Chorril-
los - - - Lima (capital and coast line).
Lima to Ancón - - Lima (capital and coast line).
Lima to Magdalena - Lima (capital and coast line).
Pisio to Ica - - - Ica (South Peruvian littoral).
There are in addition several short light-railways privately owned, and some recent additions to the above systems. Of the 1,800 miles of lines in operation 1,400 miles are of standard gauge, the remainder being narrow gauge or light-railways.

River Navigation.-In addition to this somewhat meagre railway system Peru is fortunate in possessing about 5,700 miles of rivers navigable for shallow draught steamers. The Amazon, or Marañon, forms the main stream, and, with its tributaries, affords fluvial communication over the immense area of Peruvian territory
lying to the east of the Andean range. Iquitos, the principal Amazonian port, is reached direct by ocean liner from Europe and the United States, via the 3,000 odd miles of this wonderful river which crosses Brazil from its mouth on the Atlantic Ocean. Shallow draught river steamers navigate the main tributaries of the Amazon in Peruvian territory to a point less than 400 miles from Lima, the capital.

## RAILWAY CONCESSIONS

The Republic of Peru offers a very wide field for the construction of railway lines, and the Government has created a fund of $£ 200,000$ per annum to be used in granting guarantees and offering other inducements to capitalists to open up railroads in the country.
In many parts the constructors of new lines could have the advantage of coast or harbour termini.

Concessions for the construction of railroads in Peru are granted by the Government in accordance with the Law passed by Congress in 1904, which empowered the Executive to carry out the construction of several important railways, either by granting the necessary land, and permission to develop the line for ninety-nine years, with a State guarantee of 6 per cent. for twenty years on the total capital invested; or by granting a monthly payment of a fixed sum for twenty years, which represents 5 per cent. on the total cost of construction. The Government may also grant perpetual Concessions for the making of railroads, paying as an additional inducement any sum up to $£ 1,500$ per kilometre, provided that the amount payable in one year, either to one or more concessionaires, does not exceed the

Budgetary resources set aside for railway construction or guarantees, which in 1906 (date of passing of Law), and subsequent years will amount, unless abolished by decree, to $£ 200,000$ per annum.

The plans and all particulars of a proposed line must first be submitted for the approval of the Government, who may then authorize the necessary preliminary surveys to be carried out in conjunction with representatives of the concessionaires.

The many Articles of the Decree relating to railroad construction make it impossible to give any more than a brief résumé here, but the above general conditions show the many liberal concessions which the Peruvian Government have offered in order to induce capitalists to invest money in railway undertakings for the opening up of this remarkably rich state.

## FOREIGN COMMERCE

The oversea trade of Peru is now very largely in the hands of the United States. The total foreign commerce during the past five war years has amounted in average annual value to approximately $£ 24,550,726$, of which the trade with the United States has accounted for 15 millions sterling per annum, and that with the United Kingdom to $4 \frac{1}{4}$ millions. Chile, Italy, Australia and France, come next in order of commercial importance. It is both interesting and encouraging to note that while the trade between Peru and Great Britain has heavily declined during the war, notwithstanding the elimination of German and Austrian competition, there has sprung into existence a growing commercial intercourse bętween the South American States and the British Dominions.

The trade between this Republic and Australia during the years of war averaged nearly $£ 400,000$ per annum. With some of the other Spanish American countries Canada, Australia, New Zealand, India and South Africa, have materially increased their trade. Even when these increases are discounted it is, however, no exaggeration to say that the United States has obtained the entire surplus of trade left open by the destruction of the German, Austrian and Belgian commerce. Whether she will be able to maintain her position of commercial supremacy in South America in the years of intensified production which must come, and come soon in Europe, if a commercial catastrophe is to be averted, remains to be seen. The answer to this far reaching question-for the States of South America have assumed gigantic proportions in the field of foreign commerce, and are now on a par with China and Russia -lies very largely in the hands of the people of Europe, themselves, and not a little in the hands of the Governments, merchants and commercial travellers, who form the Executive of overseas trade. In the polite SpanishAmerican States the knowledge and personality of one Government agent or traveller may be equivalent in power to a battalion of raw recruits.

The principal articles imported in order of value are as follows-bullion and currency, cloth, coal, bags, oils, lumber, machinery, cement, explosives, paper, tools, rice, tea, thread, shoes, agricultural machinery, perfumery, cast iron piping, ammunition, tin and tinware, grain, flour, underwear, electrical apparatus, books, paints and varnish, soaps, wines, tobacco, edible oils, steel plates, beans, sweets, rubber goods. furniture, shoe-polishes, scales, crockery, glassware,
enamelled iron-ware, hats, hides and leather, locomotives and automobiles, manure, pumps, toys and butter.

The principal articles of export are :-copper, sugar (granulated), cotton, gums, rubber, wool (alpaca and sheep), petroleum, tungsten, hides, rice, copper ores, cattle, coca leaves and cocaine, lead, silver, gold, antimony, hats (straw), ivory-nuts, fruits, vegetables, alfalfa seed, coffee, peppers, olive oil and tallow.

The export of copper has reached the annual value of 6 millions sterling, sugar $4 \frac{1}{2}$ millions, cotton $1 \frac{3}{4}$ millions, rubber $\frac{3}{4}$ of a million, wool $\frac{3}{4}$ of a million and petroleum $\frac{1}{2}$ a million.

The manufacture, importation and sale of tobacco is a Government monopoly.

Among the special laws of Peru directly affecting commerce must be mentioned the "Medicinal Code," under which the exact formula of all new proprietary preparations sold in the Republic must be filed with the Faculty of Medicine of Lima, and samples submitted for analysis. The fee charged for filing the formula amounts to $£ 1$ for each ingredient of the preparation.

Licenses are required for archaeological exploration and the shipment to foreign countries of valuable specimens. These can now only be obtained by recognized scientific institutions, and even then the work must be carried on under the supervision of a Government representative. All specimens discovered are held to be the property of the State, and their exportation, except in the case of duplicates, is strictly prohibited.

Although there are many openings for factories in Peru, the only form of benefit likely to be obtained from the Government is an increase of the protective duties on the competing imported article. In one case as much
as 30 per cent. was placed on an article of food hitherto imported free in order to induce a certain capitalist to erect a factory for its manufacture. Some of the local manufactures needed are glass-ware, nails, preserves, uncommon wines made from the grape, and chemical products.

## CURRENCY, WEIGHTS, MEASURES AND POSTAGE.

The principal medium is the Libra, or Peruvian pound $=£ 1$. There are 10 solis to the Libra, and each Sol equals 100 centavos. Although Peru has no paper money issued by the Government, the Banks obtained power in 1914 (owing to European War) to issue notes to the value of $£ 2,500,000$. The metric system is used for all Government purposes and for wholesale measurements, but in the retail trade in Peru, as elsewhere in South America, some of the old Spanish measures, given in previous chapters of this book, are in general use. The rates for postage are those of the Union, and there is a good letter and parcels post but neither form of communication can be registered. The telegraphic net extends to all important towns in the country, and there are several wireless stations, and a cable service to all parts of the world.

## MINING

The region of the Andes has long been noted for its great mineral wealth; and the production of precious metal is decidedly on the increase. The new code has given a great impetus to the mining industry of the Republic.

## MINERALS

Peru relies for her future prosperity upon the exploitation of the great mineral wealth which exists in every department of the State. The variety and abundance of the deposits make this country one of the richest mineral regions of the world, and the very liberal and thoroughly sound laws of the mining code should stimulate the opening-up of many new enterprises during the next few years.

Gold is not only found in considerable quantities in the Sierra, but also along the coast and in the Montaña. The department producing the most silver is Junin, which is in railway communication with the capital; and the navigable tributaries of the Amazon which run through this territory afford through communication with the Atlantic Ocean.

Copper is principally found in the Andes, but deposits of this mineral have also been discovered in the coast region. Coal, iron, petroleum and quicksilver are also found in large quantities. The average annual value of the copper exported is 6 millions sterling, petroleum 750,000 , tungsten 250,000 , lead 70,000 , antimony 20,000 , and silver 20,000 .

The mining tax of Peru is $£ 3$ per claim, which covers ten acres in the case of platinum, gold, petroleum, tin, or coal ; and about five acres when relating to other metals. There is practically no limit to the number of claims which may be held by one person or a syndicate, and there is a law in force which prevents any increase in the taxation of the mining industry for some years. In the Sierra or mountainous districts gold is found
mixed with silver and copper. The most abundant zones in this portion of the country, and the best for prospectors, are Huanuco, Aymaraes, and Colabamba. On the Peruvian coast the most auriferous region is Camana ; and in the Montaña, or forest region, Paucartambo, Sandia, and Carabaya. The two latter districts, in the department of Puno, are by far the most productive and best, as they are in a well watered and most fertile region. In the days of the Spanish Empire, Sandia was noted for its extraordinary mineral wealth.

Want of technical knowledge and capital are the only things which prevent the mineral production in Peru from astonishing the Eastern Hemisphere.

The most productive districts for silver mining are Cerro de Pasco, in the departments of Junin, and Yauli; over ninety silver mines, however, are being worked in various other regions, and the results generally have proved very satisfactory.

The richest districts in copper are Cerro de Pasco, Yauli, and Moquegua. The export of this metal from the Republic averages over 6 millions sterling per annum.

The development of the coal-mining industry in Peru will undoubtedly open up many industries which, owing to the price of imported coal and the difficulties of transport, have hitherto been financially impossible. Coal exists in large quantities on the north-western coast of Peru. A curious sight, which further demonstrates the extraordinary abundance of coal in this region, may occasionally be seen from the decks of passing steamers-the waves beating against the cliffs and rolling back blackened by coal dust.

Petroleum, mercury, sulphur, salt, borax, and alabaster are also found in large quantities.

Every new expedition into the vast semi-explored interior to prospect leads to the discovery of some deposit, and it is undoubtedly to this industry that Peru must look for its future prosperity.

## INDUSTRIES

Coffee.-One of the staple industries of Peru is the cultivation of coffee trees, which grow with extraordinary luxuriance in the Montaña region of the country.

The owners of coffee plantations in the Montaña pay a class of men known as mejoreros for every tree planted and cultivated for three years. By this system the owner of a plantation has his land fully covered with coffee-producing trees at a very small cost; and as the mejoreros will mostly accept the greater portion of their wages in rations, the planter pays but little for a property which in a few years becomes very valuable.

The average coffee crop in Peru is about eight hundred pounds of beans to every full acre planted.

Sugar and Cotton.-The principal agricultural product of the coast region of Peru is sugar, the average annual output of which is valued at considerably over $4 \frac{1}{2}$ millions sterling. Cotton comes next in order of importance, the average export of this commodity being valued at about $1 \frac{3}{4}$ millions sterling. In many parts of the country cotton plantations are rapidly taking the place of sugar estates; and the production of this article is now valued at over 2 millions sterling per
annum ; much, however, is required for home use. Maize, rice, tobacco, and the cuitivation of the vine form the other important agricultural industries.
Guano.-Along the Peruvian coast, some miles from the shore, are situated several groups of islands upon many of which are valuable deposits of guano. The export of this valuable manure has for many years been restricted owing to a concession granted by the Government of Peru to the Peruvian Corporation, who have, by their judicious management not only improved the position of the foreign bondholders, but also done much towards the opening-up of the country. In the cancellation of the external debt of the Republic, the Government transferred to its creditors three million tons of guano, and a monopoly until this amount has been exported. In 1901 several of the guano islands were, however, transferred to Chile.

## IRRIGATION OF WASTE LANDS

One of the most promising openings for the investment of foreign capital in Peru is in the irrigation of waste lands. The State grants to the capitalist the full rights of ownership of all territorial extensions which he irrigates.

Concessions will be granted for the utilization of waters when these belong to the public. All rivers, torrents, and springs are thus free to be used for irrigation purposes when they have not already been appropriated.

A good method to obtain, at a comparatively small cost, the necessary land for a large estate is to apply
for an irrigation concession, and, when granted, commence work by constructing small canals or sinking artesian wells. All land so irrigated will become the absolute property of the concessionaire, who will also have the advantage of a permanent water supply and the comparatively cheap labour obtainable on the coast of Peru.

There are excellent openings in many Peruvian towns for palatable water supplies, and the profits from these undertakings have hitherto proved very good.

## RUBBER ESTATES

The good results obtainable by estate owners in the Montaña, especially in the departments of Cuzco, Puno, Junin, and Huanuco have greatly stimulated the rubber industry of Peru.

The forests in these regions contain a very large proportion of caucho trees, which have to be dealt with under special regulations. The Government therefore decided to adopt two separate forms of contract for concessions.

The first form is for the leasing of a few hectares of land, for the term of ten years, upon the condition that no trees shall be cut down or destroyed, and a royalty of four shillings for every one hundred and one pounds of rubber extracted must be paid by the concessionaires, together with the export duty, which amounts to eight cents of a Peruvian sol (about 2d.) per kilogram of ordinary rubber, and five cents of a sol on caucho, payable at the Custom House, upon the exportation of the rubber.

The second form of contract is for the renting of "estradas gomeras," or rubber walks. Each round, or walk, contains one hundred and fifty rubber-bearing trees, and the concessionaire is required to pay a rent of fivepence per annum for each walk, and the same amount for each two acres of ground upon which the trees are situated. This is, of course, in addition to the ordinary export duty.

To gain a concession under either of these forms of contract, the prospective lessee must first employ an expert surveyor, who must be nominated by the Government; plans must then be drawn up and also accepted by the Minister of Industries.
The concessionaire is required to give a guarantee at the rate of two shillings, nominal value of the bonds of the internal debt, for each two acres of land occupied by the rubber concession. In the case of the first form of contract, ten shillings must likewise be deposited in the same bonds. The interest from these deposits is either paid, or accumulates in favour of the concessionaire.

It is easily seen that these are wise regulations, for they prevent large tracts of land lying idle through apathy, or want of means, on the part of the lessees, and the deposit has the advantage of not being an objectionable tax, but merely a small investment.

The policy of the Peruvian Government is certainly most generous, and is well calculated to protect and advance the india-rubber industry. Under the first form of contract the Government only participates in the results; should no rubber be extracted from the trees, then the State requires the concessionaire to pay nothing. Under the second form of contract the

Government requires such a small rent that nearly all the rubber enterprises of Peru, working under these conditions, are paying well. The absolute and perpetual ownership of Montaña lands can be acquired at the rate of ten shillings for every two and a half acres. The export of rubber is valued at $\frac{3}{4}$ of a million sterling.

Many nations have already realized the immense and profitable openings for trade, capital and skill in the Republic of Peru. When others turn their eyes to this "Ophir of the West," then the natural riches of this vast tropical country will cause the Republic to grow with surprising rapidity.

harbour at mollendo, peru.


PORT OF CALLAO, TERMINUS OF THE CENTRAL RAJLWAY OF PERE.


TICHO N'TATION, (ENTRAI, RAIIWAY OF PERU. (ABOUT 13,000 FEET ABOVE SEA LEVEL.)

## IX

## THE REPUBLIC OF COLOMBIA

## GENERAL DESCRIPTION

Colombia is the fourth largest country of the subcontinent, having an estimated area of about 460,000 square miles, with a population of just over five millions. It is situated in the north, or tropical zone of South America, and has a coast-line on both the-Atlantic (Caribbean Sea) and Pacific oceans. Its next door neighbours are Peru, with whom it disputed possession of the ill-famed Putumayo region-giving access to the mighty Amazon,-Ecuador and Venezuela; which seceded from the Union of three states formed by the famous liberator Simon Bolivar; the recently severed territory now forming the independent Republic of Panama-and the Canal Zone; and, to the south, the great Portuguese speaking Union of Brazil.

Although in the vortex of South American politics its geographical position could scarcely be more fortunate, for it has coasts flanking both ends of the Panama Canal, a seaboard on the Caribbean, or Mediterranean of the West Indies, is nearer than many of the other States of the sub-continent to Europe, and the great English speaking nations of North America, possesses outlets to the great rivers Amazon and Orinoco, has
several naturally sheltered harbours, and, as a crowning gift, is traversed throughout almost its entire length by the navigable Magdalena River.

Nature has also favoured this country in other ways. It is rich in minerals, precious stones, oil, coal, pasture lands, tropical and medicinal plants, and forests, but, owing to many years of internal and external warfare, now apparently ended, this great inter-oceanic State, which exceeds in size England, France and Germany combined, has not been able to progress or develop on the same rapid lines as those politically and financially more fortunate States to the south.
Topographically Colombia may be divided into five distinct regions, which vary climatically (according to altitude) from the tropical and unhealthy coast lands to the Andean heights of perpetual snow. The Atlantic seaboard is low-lying, swampy and very hot, but it possesses the fine old seaports of Cartagena and Barranquilla. The centre of the country comprises the valley of the Rio Magdalena which is navigable, by shallowdraught river steamers, from its mouth near Calamar for a distance of about 300 miles to Honda, where a series of rapids, bridged by a railway, mark the division of this fine river, which forms the great fluvial highway of Colombia, into two sections-the Upper and Lower Reaches. The latter being separately navigable by river craft for a further hundred and fifty miles to Neiva. There are also many navigable tributaries, which, in conjunction with some 700 miles of railway, form a network of communications connecting the principal towns and populated areas with the Atlantic coast and the city of Bogotá, the inland capital. About the Magdalena valley, which may be termed the de-
veloped area of Colombia, full information will be given later. The Pacific coast is very rugged, mountainous, forest covered, and but little populated or exploited. It possesses only one seaport, Buenaventura, and one inland town of importance, Cali, which are connected with each other by the only railway line in this part of the country. About one third of the entire country is composed of the mountainous region of the Andes and the Sierra Nevada. Rich in precious metals and scenery, but, in parts, almost unexplored and devoid of roads, defined tracks, and means of transport. On the southern slope of this land of Andean giants lie the great pasture plains, or llanos, of the Republic, occupying over a third of its territory, and inclining gently to the waters of the great rivers of the interior, the Amazon and Orinoco. The main forest regions lie in the valleys of these rivers, and in the Choco Territory of the Pacific Littoral.

## HISTORY

No review of Colombia would be complete without mention of its historic past. It became a Spanish Colony in 1499 and remained a crown possession for 312 years. During this early colonial period Cartagena was the capital, and ranked next in importance to Lima, Peru. It was the scene of many sanguinary fights, between the buccaneers and Spanish soldiers, being held to ransom in 1586 by Sir Francis Drake. It was a seat of the Inquisition, and many evidences of this romantic period are still to be seen in its quaint buildings and massive fortifications.

Colombia declared its independence of the crown of

Spain in 1811, and there commenced the insurrection of the three colonies, Colombia, Venezuela, and Ecuador, whose armies, headed by the great liberator, Simon Bolivar, waged a twelve years' war against the Cortes, finally achieving complete independence in 1824. This was followed by the retrocession of Venezuela and Ecuador, which became separate Republics. In 1886 the constitution was altered. The States constituting "The United States of Colombia" lost their sovereign, or federal rights, and became departments of a homogeneous Republic. A long period of internal trouble and external warfare paralyzed the growth of the new State, which did not begin to rise from the ashes of the past until the dawn of the twentieth century, since which time its progress both politically and economically has been wonderfully rapid. In recent years, however, that section of the country forming the isthmus with Central America became the independent Republic of Panama; and the boundaries of Colombia with the neighbouring States, especially with Peru on the Putumayo, have been finally settled.

## GOVERNMENT, POLITICAL DIVISION, RELIGION, AND EDUCATION

The form of government is Republican, and is based on the constitution established under H. E. Senor R. Nuñez in 1886. It consists of a President, a Cabinet of Ministers, a Senate, and a Chamber of Deputies. The President is elected by Congress for a period of four years. He appoints a Cabinet of seventeen ministers. The 35 Senators are chosen in the proportion of 3 from each
department by the Local Governor and Council, with 3 additional members, representing the Federal District of Bogotá, appointed by the President. The Chamber of Deputies has 92 members elected by the people in the proportion of one for each electoral division of 50,000 voters.

For the purposes of administration the 460,000 square miles of territory, forming the Republic, is divided into 15 Departments, 2 Intendencias and 7 Comisarias. All the more populated and accessible regions of the State are included in the departments. The Intendencias and Comisarias may be termed the ill-defined back-blocks. The Departments of Colombia, in order of population, are as follows :-

| Name of Department. | Approximate Population. |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Antioquia | - | - | - | 700,000 to 800,000 |
| Cundinamarca | - | - | 700,000 to 800,000 |  |
| Boyacá - | - | - | - | 500,000 to 600,000 |
| Santander | - | - | - | 400,000 to 500,000 |
| Bolivar | - | - | - | 400,000 to 500,000 |
| Panamá | - | - | - | 400,000 to 500,000 |
| Caldas | - | - | - | - |
| Nariño | 300,000 to 400,000 |  |  |  |
| Tolima | - | - | - | 200,000 to 300,000 |
| El Valle | - | - | - | 200,000 to 300,000 |
| Cauca - | - | - | 200,000 to 300,000 |  |
| Santander del Norte | - | 200,000 to 300,000 |  |  |
| Huila | - | - | - | 100,000 to 300,000 |
| Magdalena | - | - | - | 100,000 to 200,000 |
| Atlántico | - | - | - | 100,000 to 200,000 |

Roman Catholic is the state religion, but all creeds are tolerated and may own property and conduct services. The educational system has been considerably improved during recent years. There is a Minister of Instruction,
free primary and secondary schools, and the two universities of Bogotá and Medellin.

There is an extensive postal and telegraph service, connecting all parts of the country. Cables can be dispatched via Galveston or Colon, and there are six wireless stations.

## THE POPULATION

As in all South American countries the population of Colombia is very mixed. Out of the five million inhabitants it is estimated that at least half are of white origin, principally Spanish, while the remaining fifty per cent. is composed of Meztizos, or half-breeds (white and Indian), pure-blooded Indians, negroes, and Zambos, a cross between the two coloured races. There are about 100,000 uncivilized Indians inhabiting the far interior, and some of these tribes are still the deadly enemy of the white man who attempts to penetrate the million square miles of almost unexplored river, forest and plain, forming the great dead-heart of torrid South America.

The natives of the Andean region are, however, mostly civilized, and of a somewhat higher order of intelligence than the still wild inhabitants of the jungles of the Amazon and Orinoco. Of the white and half-breed population the former are the governing class, and comprise also the merchants, planters, ranchers and superior civil servants, while the latter are frequently successful shopkeepers, foremen, and subordinate officials. Owing to war and revolution agricultural and pastoral labour, although at present sufficient, is by no means plentiful, and owing to the illiterate nature of a
large section of the population intelligent artisans and mechanics are difficult to obtain.

## THE CAPITAL

Bogotá, the capital of the Republic, has a population of about 121,000, and is situated on a broad Gabana, or plateau of the Andes, at an elevation of about 8,500 feet above sea-level. It is an inland city, distant about 600 miles from the Atlantic seaports of Cartagena and Barranquilla, and is reached from this coast in about eleven days by a combination of river (steamboat) and railway transport.

Owing to its elevated position on the mountain slopes the climate of Bogotá is both mild and equable. Although only four degrees north of the equator the daytime temperature (shade) does not often exceed $65^{\circ}$, and at night it seldom falls below $53^{\circ}$. It is picturesquely situated on a gentle slope dominated by round-topped hills. The principal boulevard is the Avenida de Colon, a broad thoroughfare, laid out with gardens, statues, and trees; and from this central artery the narrow streets lead away to right and left in straight lines, on the general Spanish-American principle. The city possesses a University and several fine public buildings, notably the Capitolio, or Houses of Parliament. It is lighted by electricity and served by tramways, but the majority of the houses are of the stucco-bungalow type so familiar to travellers in Latin America. There are two broad plazas, a hospital, several good stores, a theatre and picture palaces. The surrounding country is very fertile and yields an abundance of cereals and dairy produce.

## MEANS OF INTERNAL COMMUNICATION

The fortunate possession of the Magdalena River, which traverses the centre of the country from the Atlantic coast to the little town of Neiva, a total distance of over 800 miles, makes the steamboat service on this river and its main tributaries the principal means of transport from the coast to the interior and vice versa. The railway lines, which have a total length of about 700 miles, may be classified into four groups: (1) the three lines which connect the principal Atlantic ports and Calamar, at the head of river navigation; (2) the short line bridging the rapids of the Rio Magdalena at Honda, and the other lines of this valley ; (3) the lines connecting the capital, Bogotá, with the Magdalena River navigation services at Girardot and other portions of the Gabana, and (4) the isolated Cúcuta and Cauca Railways, which are not connected, and serve only to tap rich but isolated regions of the State. A study of the accompanying map will show the position and purpose of these lines, especially those of the first three groups, which form, with the steamboat service on the Rio Magdalena, a continuous system of transportation, from the Atlantic coast to Bogotá, the capital. There is, however, a fifth service, which connects the port of Buenaventura on the Pacific coast with the inland town of Cali, from whence a combination of river and rail transport links these two Pacific littoral towns with the capital and the Atlantic coast. The following, taken from a British Consular Report, will show the railway lines in operation at that date.

| THE REPUBLIC OF 'COLOMBIA |  |  |  |
| :---: | :---: | :---: | :---: |
| Barranquilla Railway |  | - 27 Kilometres. |  |
| Cartagena | " | - 105 | , |
| Santa Marta | " | - 96 | " |
| Sabana | " | - 40 | " |
| Northern | , | - 62 | " |
| Southern | " | - 29 | " |
| Girardot | , | - 132 | " |
| Espinal | " | - 25 | " |
| Dorada | " | - 119 | , |
| Antioquia | " | - 144 | " |
| Cauca | " | - 137 | " |
| Cúcuta | " - | - 71 | " |
| Colombian National Rail- |  |  |  |
| way - | - | - 137 | " |

Nearly all these railways were constructed with British capital.

## X

## THE REPUBLIC OF COLOMBIA

## COMMERCIAL SECTION

Foreign commerce. Regulations regarding commercial travellers. Import duties. Free entry. Contracts. Industries. Agricultural and sylvan products. Pastoral industries. Opportunities for establishment of new industries. Concessions. Railways. Japanese colonization. Mining. Value of ores extracted. The mining code. Currency, weights, measures and postage.

## FOREIGN COMMERCE

The oversea trade of Colombia, previous to 1914, was mainly conducted with Great Britain and the United States, but Germany and Belgium were commencing to send increasing quantities of merchandise into the country. The administration of many of the railway lines being in British hands caused the supplies for these great undertakings to be imported regularly from the United Kingdon, together with much of the sugar-milling and coffee estate machinery, but the United States supplied the bulk of the material required by the railways and other public works controlled by the Government, also much of the agricultural and mining machinery.
During the great European War, however, the United States naturally increased both her imports and exports from and into Colombia, and a very stiff although friendly
fight will have to be successfully made by many British firms if they wish to regain the position held in this country in pre-war times.

The total foreign commerce of Colombia amounts in approximate annual value to $4 \frac{1}{2}$ millions sterling and $5 \frac{1}{2}$ millions sterling, imports and exports, respectively. Taking the year 1916 as an example of the war trade period, we find the total commerce with the United States amounting, approximately, to $£ 7,100,000$, whereas that with the United Kingdom valued only $£ 1,800,000$. Spain, France and Italy were the next most important traders in the order given. From this brief recital of statistics some idea will be obtained of the far-reaching havoc wrought by the Great War in British commerce with this portion of South America.

The principal articles imported in order of value are as follows :-cotton cloth, drugs and medicines, rice, hardware, wheat, vegetable products, paper and cardboard, bags, silver coin, glassware, leather, oils, electric machinery and apparatus, wines, motor cars, machinery, perfumes and soap, rubber goods, musical instruments, firearms, ammunition, explosives, and coal.

The principal articles of export are coffee, hides and skins, gold, bananas, panama hats, platinum, essences, rubber, tanning extract, live animals, tobacco, silver, and sylvan products.

Commercial Travellers.-In the Republic of Colombia commercial travellers are subject to two forms of taxation. One is the ordinary national taxation varying according to the class of commercial operations in which they are engaged, and the other is a form of local taxation. These local dues also vary, and are of primary importance. In the municipality of Bogotá, the capital, there are no
local dues, but in Cartagena, one of the principal seaports, permanent agents must pay $£ 12$ per annum and commercial travellers $£ 1$ for the duration of their stay in the municipality. In Santa Marta commercial travellers are required to pay $£ 1$ per month, in Manizales $£ 2$ per month for the exhibition of samples, in Medellin the charge is $£ 8$ (minimum) for four months, in Cali the tax amounts to $£ 6$ for 17 days (minimum) and $£ 1$ per month afterwards. There are no taxes of this kind in the municipality of Barranquilla, nor in the districts of Honda and Tumaco.

On the Government railways no freight abatement or special facilities are made for the conveyance of travellers' samples. On the entry of samples into the Republic security must be given at the Custom House as a guarantee that they will be exported within gne year. Invoices of samples must be legalized by one of the Colombian Consuls in the country of export.

Free Importation.-There are seventeen different classes into which imported goods are divided for the purposes of assessment. The charges on the different classes vary from " free importation" to $\$ 2.25$, and there is a surtax on all classes amounting to 70 per cent. By a special concession of the Ministry of Finance materials for the establishment of electric plants are, under certain restrictions, admitted free into the Republic, and there is no import duty on goods ordered by the National or Provincial Governments, nor on live animals, agricultural seeds, printed books, or educational matter. The importation of arms and explosives is prohibited except under licence from the Ministry of War.

Contracts.-While it is quite impossible to give here definite information relating to specific contracts which
would become out-of-date in a matter of weeks or months, it must be said that in Colombia, as in all the less exploited South American States, there is a wonderful field for British enterprise. An example of this is afforded by the Magdalena River dredging contract. To enable ocean steamers to sail up this great fluvial highway of the country it is necessary that the bar at the Bocas de Ceniza be dredged. The Colombian Government was authorised to raise over two million dollars for the carrying out of this operation, and a contract was also made with a German firm for the opening of the mouth of this river, but owing to the war work has now been stopped for some years.

## INDUSTRIES

Agricultural and sylvan products.-Although Colombia undoubtedly possesses considerable mineral wealth, as yet only partially developed, the most important industry of the country is at present agriculture. Coffee is largely grown and annually exported to the value of about $2 \frac{1}{2}$ millions sterling, but, as in all coffee-growing countries, the prices obtained are more or less determined by the enormous supplies from Brazil. Bananas are largely cultivated in the coast region, especially around the port of Santa Marta, and are exported to the average annual value of approximately $£ 150,000$. Tobacco is grown not only for home consumption but also for export in small quantities. Potatoes, which are indigenous to the Andean region of South America, form an important article of the food of the people and are therefore widely grown, especially by the small native cultivators. Among
other products must be mentioned rubber, cacao beans, ipecacuanha, tagua or ivory-nuts, from which buttons are made, fruits of many kinds, both tropical and temperate, and mahogany, cedar, brazil, and other woods, from the vast forests of the Magdalena valley and the Pacific coast region. Fibrous plants, such as henequen, are now being largely cultivated to supply the demands of the local panama hat industry, and cotton is being grown successfully for the recently established cotton mills. The average value of the panama hats exported exceeds $£ 120,000$ per annum. Although at present cotton is only grown on a very small scale the prospects for its extensive cultivation are considered good.

Pastoral Industries.-Cattle are raised in considerable numbers on the vast upland pastures of the interior, but so great is the area of the Colombian prairies that only a fraction of the land is at present needed for the herds. In this respect there is room for enormous expansion, considering the world shortage of meat. The principal drawbacks are, however, the lack of transport, or even roads, and the scarcity of labour. For these reasons it is at the present time considered unprofitable to export either live cattle or frozen meat, but hides are annually shipped to the value of $£ 500,000$. There are also considerable areas of grazing land bordering the Magdalena and some of its navigable tributaries on which cattle are being raised for export. The annual value of the live cattle exported is, however, only $£ 10,000$. Here again there is scope for enterprise.

Some extracts from an official report of a journey through the Magdalena Province and the but little


A STREET, CARTAGENA.


THE CATHEDRAL, CARTAGENA.


PLAZA DE LOS COCHES, CARTAGENA.
(By kind permission of the Colombia Railuay and Navigation Co. Ltd.)

developed peninsula of Goajira, undertaken by Mr. M. F. Dawe, F.L.S., Director of Agriculture to the Government of Colombia, with the object of studying the possibilities of these regions, may be of interest here. It should be pointed out, however, that some parts of these vast territories are low-lying and malarious and in places the natives are still a source of danger.

## LOWER MAGDALENA

Cacao.-" There are a few cacao plantations along the Carare, and I was impressed by their general appearance in spite of the little attention which they appear to receive. The cacao-beetle seems to cause very little trouble to the trees, and the plantations are said to yield good crops. I believe there to be a promising future for cacao along the Carare, given the plantations are established with selected seed and well cultivated and cared for."

Sugar.-" The rich, fertile, alluvial lands along the Carare should prove suitable for the cultivation of sugar, which could be grown on a large scale. The great drawback is that there is very little local labour, and labour for sugar planting would need to be drawn from other sources."

Corozo-nut.-" I was struck with the abundance of a palm known locally as corozo, a name unfortunately applied indiscriminately to many palms. It is evidently identical with the palm known in the Tolima as cuesco, though the fruits are much larger than the Tolima variety. As these palms are exceedingly abundant in many parts of the tropical regions of this country and the nuts are
available in very large quantities, a sack of the nuts have been forwarded to the Imperial Institute of London for examination to ascertain if they may be of commercial value as a source of oil. Should they prove to contain a good percentage of oil, and the crushing of the nuts presents no difficulty, a new and very important industry for Colombia should be developed."

Maguey Fibre.-" While at Rio Hacha preparing for a journey to the Goajira peninsula, I made short excursions in the neighbourhood. On one of these, along the old eastern road to Padilla, I was agreeably surprised to find extensive areas covered with fibre yielding Furcraeas, known locally as Maguey. In fact, so abundant are these plants, that the areas covered may appropriately be described as nature-sown plantations. The fibre is utilized by the Indians for making their hammocks, and is of finer quality than the fique of the interior. The Furcraea has been identified as F. macrophylla, (Baker), and as far as is at present known, fibre has not been produced commercially from this species. In the question of the quality, Mr. Lyster Dewey, the Fibre Expert of the United States Department of Agriculture, writes to me as follows: "Some specimens of fibre of Furcraea macrophylla which we have cleaned by hand from leaves received here at this Department indicate that the fibre is finer, whiter and softer than that of either the true sisal of the Bahamas or the henequén of Yucatan."
"The possibility of developing a new and important fibre industry in this neighbourhood appears to me exceedingly favourable. The lands in the region of the Calancala River, excepting parts which are subject to being flooded in the rainy seasons, are on the whole
suitable for fibre cultivation ; the best proof of this being the existence of these Furcraeas in a state of nature over large areas. The situation of these lands is also favourable being within seven or eight kilometres of the township of Rio Hacha. The lands are almost level, or only slightly undulating, and therefore adapted for rail transport for the conveyance of the leaves to the factory. The special recommendation of this locality for a fibre proposition, lies in the fact that there is an abundant supply of leaves ready for cutting, so that a decorticator could be installed and extraction commence at once, instead of having to wait three years for the plantations to come into bearing as is the case with sisal. While existing sources of fibre are being exploited, however, plantations should be laid down so as to provide a continuous supply of leaves. Another feature of this proposition is that cheap Indian labour can be employed ; the local Indians can at present be obtained for a handful of maize per day, but a just wage or suitable payment would doubtless secure permanent and adequate labour. The only doubtful point in the question of plantations is the irregularity of the rainfall, but as these Furcraeas thrive under natural conditions, it is not unreasonable to presume that their cultivation would likewise be successful. This locality has the advantage that the necessary machinery can be established on the banks of the Calancala River, where adequate water is, I am informed, always available."

## GOAJIRA PENINSULA

Salt.—"By far the most important natural product exploited in the peninsula is salt. The principal wealth
of the north-western part of Goajira lies in salt, salinas occurring along the coast practically throughout the whole extension of the peninsula. I am informed these salinas are capable of producing annually no less than a million of sacks. The present production is, however, limited, owing to the fact that there are other salinas nearer the centres of consumption, for example, Santa Marta, Barranquilla and Cartagena. In competition with these centres of production, the product of Goajira, owing to the question of situation, works out at a higher cost ; only by a reduction by the Government of the derechos de consumo could the salinas of this peninsula be worked to greater advantage."

Resin.-" A new product found in this peninsula is that known as Qüika resin. This is produced by a small tree, Cercidium spinosum (Tulasne) and the trunk and branches are covered with a layer of this resin ; even the roots, when exposed to the air, become covered with resin. A single tree should yield several pounds of this product, and as it is very abundant in certain parts, it should prove an important new article of export if its value is such as I believe it to be. Samples have been forwarded to Europe for examination and report."
"At the extreme end of the peninsula is found another resin which may also prove of export value. It is known as Tacamaca and to the Indians as Aria. It is afforded by a small tree which I take to be a species of Bursera. The question of its properties and commercial value is being investigated."

## PROVINCE OF PADILLA

Coal.-" My visit to Barrancas was made specially to inquire into the coal deposits said to be found in the Cordillera at Cerrejon, but on arrival there found the coal further from Barrancas than I was led to believe, so later the same evening we returned to Fonseca. I am told that coal has been found at Conejo and at other points along the Cordillera, so it would appear that these are out-crops of the same vein, and that coal is abundant throughout this region of the Cordillera. If this be so, it is a point of considerable importance for the future development of this section of the Department, for what would more justify a railway through to the Goajira peninsula with its terminus in the bay of El Portete as a coaling station and shipping port, than rich mines of coal?"

## PROVINCE OF VALLE DUPAR

Ginger.-" On leaving Santo Tomás the road soon commences to ascend, the track was along forest clad streams and open grassy hill slopes, where I observed the cattle were in better condition than on the plains. I was very agreeably surprised this morning on making the important discovery that ginger is wild in these parts. The plant has never before, I believe, been found in a truly wild state, having been supposed for many years to be a native of tropical south-east Asia. In this neighbourhood it is found wild and in great abundance. On subsequent inquiry I found that ginger grows wild over
extensive areas on the lower hills of the Sierra Nevada range, and also I am informed in various parts of the Eastern Cordillera: This is therefore another laurel for South America, and for Colombia in particular in that the theory that ginger was originally a native of tropical south-east Asia must now be abandoned and the credit given to Colombia. To Cinchona (also abundant in a wild state on the Sierra Nevada), cacao (also indigenous to the Department of Magdalena), the potato, various rubber plants and tobacco, etc., economic products which South America has furnished for world-wide use, must now be added ginger. The commercial importance of this discovery, however, lies in the fact that there are extensive wild sources of a valuable product which can be immediately exploited, and a new local industry established in the collection and preparation of the roots. I consider this discovery of great importance, and have already recommended an immediate shipment of a consignment of half a ton of these roots to foreign markets, in order to afford a practical test of its value in comparison with the cultivated root. Now is the dry season (December) in this region, and now is the season for the collection of the roots, the plants being in a dormant state."
"Apart from the question of the exploitation of the wild product arises the possibility of its cultivation, and the initiation of a new plantation industry for this part of Colombia. Ginger is well known to be somewhat fastidious as to soils, the most valued root being produced in Jamaica, where it was probably introduced originally from South America and not the East. The fact that ginger is indigenous is proof that not only the soil, but also the climate, is appropriate ; and it therefore only
remains for planters to take up its cultivation as a plantation industry. I have noted that the roots of cultivated ginger are generally double the size of the wild product. A word of warning should, however, be given regarding its curing and drying; whatever method be employed the roots must be thoroughly dried and bleached before shipment, or it may reach the market in a mouldy or decayed condition and bring disappointment at the outset."

A Goajira Railway.-"I understand that it has been proposed to construct a railway from Goajira to Tamalemeque on the Rio Magdalena, with the object of its being eventually extended to Bogotá. Such a line would render possible the exploitation of the indigenous products such as salt (from Goajira), timber, brazil-wood, divi-divi, pita de Colombia, maguey, etc., etc. It would give an impetus to plantation industries such as sugar growing, cotton cultivation, coffee planting, cacao, ginger, etc. It would facilitate the movement and export of cattle and the importation of breeding stock. It would help to develop Goajira, if such a railway traversed the peninsula to the bay of El Portete, since it must do as Rio Hacha is only an open roadstead and not a port where steamers can call. It would place the interior parts of this Department within touch with the centres of commerce and civilization, and it would liberate the large number of beasts now employed in slow and monotonous transport for the tillage of the lands, thus increasing the production of crops. These are, in short, some of the advantages that such a railway would bestow on agriculture."

Japanese Colonization.-" The total population of the Department, according to the last census, is 140,106 .

It is clear that no rapid progress can be made in agricultural and mining industries without recourse to immigration. The European War precludes any possibility of obtaining European colonists, now or after the War. The Government would therefore be well advised to encourage Japanese immigration and colonization, which has been attended with such magnificent results in other parts of South America and especially in Brazil. There are various Japanese Emigration Societies who have furnished Japanese settlers to many agricultural enterprises in South America, and particularly Brazil, where there are, in the State of São Paulo, some 15,000 Japanese immigrants. There are also political reasons why Japanese would prove suitable settlers for Colombia. I would therefore venture to recommend that the Government of Colombia should enter into relations with the Government of Japan or with one or more of the Japanese Emigration Companies, with the view of securing Japanese settlers to develop the resources of this country, and particularly the large and important Department of Magdalena in the region of the Sierra Nevada."

## MINING

It is literally true to say that there are thousands of square miles of mineral bearing lands in Colombia. The variety and abundance of the deposits make this country one of the richest mineral regions of the world, and, combined with the liberal though somewhat cumbersome laws of the mining code, should stimulate the opening up of many new enterprises in the very near future.

Gold is principally found in the Province of Antioquia,
where both alluvial deposits and quartz reefs are largely worked. New discoveries are continually being made. A recent example of which are those on the rivers Neiva and Chervigo, and on the more accessible Cauca and Neche. The average value of the annual production varies from $£ 500,000$ to $£ 900,000$. There are also large deposits of platinum-gold alluvium on the Pacific coast. The average annual value of the platinum exported exceeds $£ 100,000$. Many of the gold-bearing rivers provide profitable working for dredgers and for the individual miner.

Coal exists in almost every part of the country, and is likely to be soon exploited on a large scale by American capitalists. These fields should derive additional value from their proximity to the Panama Canal.

Copper has been discovered in the Sierra Nevada, and elsewhere in the Departments of Antioquia, Boyacá, Tolima, and Santander. There are numerous silver deposits, but very little is being done to develop them, although it has been estimated that over five millions worth of the precious metal has been obtained from the soil of Colombia since the Spanish Conquest.

Natural petroleum springs have been discovered over a wide area, and are said to resemble the famous Texas oil-fields. These oil-bearing lands are being developed by foreign capital, and large refining works have been erected. The future of this industry appears to be wonderfully promising.

Colombia has for many centuries been famous for its emerald mines, which were worked by the Indians before the arrival of the conquistadores. During the Spanish Dominion these mines were operated by slave labour, and produced numbers of magnificent gems.

Capital has been not always successfully expended in considerable amounts during recent years in attempts to further exploit the ancient emerald mines of the Muzo, Somondoco, and Coscuez districts, situated a little over one hundred miles north of Bogotá, the capital.

Mining Code.-The present mining law of Colombia was founded upon the code adopted in 1868 by the State of Antioquia, which was then, and is now, the principal mining centre of the country. The code, with certain amendments and exceptions, became the mining law of the entire Republic by decree of the National Government in 1887. Although alterations and additions have from time to time been made the law remains substantially the same as in the original code.

It provides that all mines within Colombian Territory become the property of the nation, and that in the case of emeralds, coal, salt (and guano deposits), the sole right of exploitation for revenue purposes shall be vested in the Government. Other mines, irrespective of the ownership of the land, can be located and worked under the general mining code, except where the surface is devoted to agriculture or held by charitable or educational institutions. In which case the legalized consent of the owners must be first obtained.

In order to exploit emerald, salt, coal, or guano deposits a special agreement must be made with the Government or a concession obtained. It is usual for the Government to grant a lease for exploitation, demanding (for emeralds) : (1) a denouncement tax of $\$ 5$, (2) a royalty of 10 per cent. on the gross sales, (3) power to purchase all stones at valuation, and (4) supervision of operations, record, and sale.
In the case of gold, silver, copper, platinum, or other
metals, it is only necessary to comply with the general terms of the mining code. The most important provisions of which are as follows :-
(1) Foreigners, whose motherland has secured by treaty or gives reciprocal rights to Colombians, may prospect for and own mines.
(2) When a mine or alluvial deposit has been discovered it is necessary, in order to obtain a definite title of ownership, to (a) give notice by self or agent of discovery and exact location to the alcalde or local authority of the district. (b) Obtain a copy from that official of entry in Location Book. (c) Within 90 days file a formal denouncement with the Governor of the Department together with copy of official entry in Location Book, revenue receipt for proper fees, and stating a base-line for survey.
(3) Publication for a period of three weeks is then officially made of the denouncement, and owners of adjacent mines are cited.
(4) Within 60 days after publication and citation a petition must be made to the alcalde for delivery of possession. The cost of this proceeding, which entails transport and food for the alcalde, surveyors, and possibly other officials, has to be borne by the prospective mineowner.
(5) In the event of opposition the case is tried in the courts of law.
(6) If no opposition is made the claim is surveyed and a written description made and signed by all present at the delivery.
(7) Application must be made within 60 days for the issue of the patent of ownership, or " Titulo."
(8) Finally, the Titulo must be registered.

Unlike many other mining countries Colombia does not insist on work being done on a claim after the title has been issued. A small annual tax serves to protect the ownership. The fees charged, both for registration and as annual taxes, are very small. Care has to be taken when denouncing a mine that it is correctly described as a " new" or " ancient" discovery. The generous nature of the Colombian Mining Code is shown by the fact that very extensive water and timber rights are allowed as part of the claim and without payment of additional taxes.

## CURRENCY, WEIGHTS, MEASURES, AND POSTAGE

Although Colombia has adopted the gold standard, and has for its principal medium the gold dollar, which is of the same fineness and consequent value as that of the United States gold dollar, there is, in circulation, a very large amount of paper money, of which the rate of exchange varies.

The other coins constituting legal tender are: (gold) the Double Condor=20 Colombian gold dollars, the Condor $=\$ 10$, the Half Condor $=\$ 5$, the Dollar $=100$ cents. ; (silver) the Half Dollar $=50$ cents, the Peseta $=20$ cents, the Real $=10$ cents, (nickel) a five-cent piece, (bronze) a two-cent piece and a one-cent piece.

Notwithstanding this formidable array of coins the paper dollar constitutes the principal medium of exchange.

The metric system forms the standard for all weights and measures, but there are in general use at least three of the old Spanish measurements, the Vara $=33.9$ inches, the Libra $=1014$ pounds, and the $A r r o b a=25.3$ pounds.

The postal service is fairly good and extends (by express rider) even into the remote interior. Colombia is one of the signatories to the Postal Union. There is a fairly extensive telegraph net, and a wireless service. The limit of size for conveyance by parcel post is 2 feet in length by 4 feet girth.

## XI

## THE REPUBLIC OF BOLIVIA

## GENERAL DESCRIPTION

The fifth largest country in the New World is Bolivia, which differs from every other state in South America, except Paraguay, in not possessing a sea-board. The area of the Republic is estimated at about 600,000 square miles, with an approximate population of $2,900,000$. Its northern and eastern frontiers are contiguous with the United States of Brazil ; on the south stretch the Republics of Argentina and Paraguay, and it is separated from the Pacific Ocean by Chile and Peru.

Bolivia is divided into two distinct regions : the high table-land of the western half, which is almost equal in area and altitude to the lofty plateau of Tibet, and the low swampy plains of the east, many parts of which are covered by dense tropical forests which stretch, like a vast sea of tangled growth, to the Brazilian frontier.

The Andean range, which completely crosses Bolivia, reaches its loftiest point in the department of La Paz, where the highest peaks of America, and one of the greatest snow ranges in the world, rise majestically skywards. The most lofty of these mountains is Illampu, which is estimated to rise 27,000 feet ; almost within sight of this giant stands Illimani, the altitude of which
is supposed to be 25,000 feet; between these outposts other lofty peaks maintain the line of perpetual snowfields and eternal glaciers.

One of the most beautiful views in all Bolivia may be obtained from the plateau of Oruro, as the sun sinks behind the snow-capped summit of Sajama, and the smoke pours from its crater, darkening the bloodshot heavens with its volcanic dust. At the foot of the mountain, giving additional interest to the scene, numerous streams of boiling water flow from hidden crevices on to the broad plateau.

It would be impossible to mention the many peaks, volcanic and otherwise, which here form the highest portion of the Andean range, but it is sufficient to say that explorers and mountaineers may find in this portion of Bolivia regions and summits as inaccessible as in the great Himalayas.

Two branches of the Andean range run through the western portion of the country, the principal chain being called the "Cordillera Real," and the other the "Coast Sierra." Between these lofty mountains lies the plateau of Bolivia, at an average altitude of 12,500 feet above sea level.

On this high table-land are situated the principal cities and towns of the country. Here the climate is temperate and, at certain times and places, even cold. In the centre of these highlands lies Lake Titicaca, the most elevated expanse of fresh water in the world.

This huge, lake is considerably larger than the Straits of Dover, being 120 miles long and 50 miles wide at its broadest part. Steamers traverse it in many directions, connecting the various towns which lie along the shore.

The waters of Titicaca form the boundary between

Peru and Bolivia ; and on the Bolivian side is situated the famous "Island of the Sun," the birthplace of Manco Capac, who founded the ancient Inca Empire which held dominion over the whole of Central South America about a thousand years ago.
The Incas were, perhaps, the most mysterious race the world has ever known. Possessed of extraordinary physical powers, as attested by the ruins which still remain of their gigantic stone palaces and temples at Cuzco in Peru, they were compelled by the local chiefs to work from sunrise to sunset without any pay or reward whatsoever! A house and land for cultivation were given free to every man upon attaining a certain age, and he was then compelled to marry a woman selected by the authorities.

Among the many other curious laws which governed these early inhabitants of South America was one prohibiting the doors of houses from ever being closed, so that the acts of every person might at any time be seen by the authorities. Taxes were paid in labour, and when it was considered necessary by the "Inca," or King of the Incas, to construct a road several hundred miles long across mountains, over swamps, and through dense tropical forests, several thousand loyal subjects would be compelled to devote the remainder of their lives to the task!

The great power behind the Inca throne was the religious respect offered by the millions of superstitious subjects to the sacred descendants of the "Children of the Sun."

This peculiar autocratic and yet paternal government crumbled to dust before a small army of Spanish adventurers who came from over the seas and conquered the


APULO HOTEL, COLOMBIA.


PORT ON THE MAGDALENA AT GIRADOT, COLOMBIA


REVIEWING TROOPS AT SUCRE.


THE GOVFRNOR'S HOUSEIAND THE CATHEDRAL, SANTA CRUZ.
country, making it a portion of the famous Spanish Empire.

South of the Titicaca basin lies another large lake named Poopo, which gives rise to the Desaguadero River and its several important tributaries. This fine system of waterways affords communication with all the most inhabited parts of the Bolivian table-land.

## CHIEF TOWNS

The constitutional capital of the Republic is Sucre ; but the most important town is $L_{A} P_{A Z}$, which, however, leaves much to be desired in the way of street-paving, architecture, and public works. But considering the somewhat inaccessible position of Bolivia it is to be wondered at that Bolivians have managed to do what they have in a country naturally very rich but comparatively destitute of population, lacking means of quick communication, and without a sea-board.
Notwithstanding all these disadvantages, however, Bolivia is rapidly developing, and at no far distant date the wealth of this vast country will surprise those who have hitherto devoted their attention to countries more exploited but consequently more played out.

About La Paz, which has a population of 100,000 , very little can be said, for were it not for the unbounded hospitality of the inhabitants, life in this quiet, oldfashioned capital would soon grow very monotonous. The only other cities or towns of any importance, other than La Paz, are Sucre (Pop. 30,000), Cochabamba, Potosi (Pop. 30,000), Tarija, Santa Cruz, Oruro, and Trinidad, which is the capital of the department of Beni.

## CLIMATE

The climate of Bolivia, as in all mountainous countries, varies according to altitude. On the plains and in the forests it is very hot and damp; on the table-land the atmosphere is considerably cooler, and the climate may be considered temperate. The difference in temperature between day and night is very marked, and frequently necessitates the use of thick wraps after sunset. The dry season lasts from June to November, and the wet, or summer season, from December to May. The climate and health of Bolivia varying so much in different regions, it is necessary to detail the peculiarities of the different Departments in order to give a fair conception of the climate of the whole country.

Sucre, in the valley of the Pilcomayo; Cochabamba, in the valley of the Tapacari ; and Sorata, in the Sorata River valley, enjoy perpetual spring, and a climate of unsurpassed salubrity.

Santa Cruz, Trinidad, and the Yungas mark the regions of a continuous tropical summer, where the rains are more frequent and copious, and where the earth yields her fruits in astonishing richness.

While the wet season of this part continues from November to April, rains, though less frequent and abundant, occur during the remaining months. By reason of the mosquitos, the annual inundation of large areas of this region, and the continuous hot climate, and consequent noxious exhalations from the decaying vegetation, malarial fevers and other diseases common to warm climates are prevalent. This is more especially true of the extensive tropical provinces of the Department of Beni, though, unlike the fevers of the malarial districts
of Colombia, and Brazil, they yield to simple treatment, while the epidemic maladies which occur here from time to time are not of a violent character.

Along the narrow valleys of the Mapiri and Tipuani Rivers, where the purifying currents of fresh air are, in a measure, obstructed by abrupt and elevated mountain walls, a tertian fever prevails, called terciana, of which the paroxysms occur about every forty-eight hours. In the absence of proper medical treatment, a large percentage of the mortality occurring among the Indians of these and other low valleys of Bolivia results from this disease. Strangers entering these sections, and especially Mapiri and Tipuani, should be amply supplied with quinine, and carefully avoid freshly plucked fruits and alcoholic drinks.

## NATURAL PRODUCE

Bolivia abounds in nearly every variety of tropical, semi-tropical, and temperate fruits, flowers, and fauna. On the torrid plains granadillas, anona, pineapples, sugar-cane, cocoa, coffee, rice, and cotton grow wild and in profusion ; but owing to the lack of means of transport practically nothing, except precious metal, is exported.
Coca.-The leaves of the coca tree, which grows wild in the forests, are dried and chewed by the Indians, who are enabled by the constant use of this highly stimulating drug to accomplish long journeys on foot. It is no uncommon occurrence for one of the native guides, employed by the Bolivian Government to conduct travellers on horseback through the country, to run in front of a trotting horse for fifty miles in one
day with but little rest or food. In this manner journeys of many hundreds of miles are accomplished. These "coca-chewers" of Bolivia and Peru look worn, haggard, and prematurely aged, but their powers of physical endurance are truly wonderful. To any one uninured to the peculiar effects of this deadly drug, chewing coca would doubtless prove fatal, but the Indians are, from infancy, accustomed to its use, with the result that they do not feel fatigue, hunger, or in many cases pain.

In the more temperate regions, lemons, figs, grapes, peaches, apples, plums, barley, and wheat are cultivated in sufficient quantities to easily supply the home demand. The total area under cultivation is approximately 5 million acres.
Fauna.-The almost impenetrable forests of the Beni country, which is the most inaccessible region of Bolivia, contain, besides many tribes of Indians, jaguars, pumas, tapirs, wild cats, monkeys, snakes, and alligators.

Big game hunters would here find a paradise of sport. The beasts of this lonely region have not as yet been made nervous by the screech of the engine or the repeated crack of the " Express" or " Metford," as in many parts of Africa and India.

Placed by nature amidst this wild jungle, as if to compensate for the more objectionable inhabitants, are large numbers of birds of gorgeous plumage, adding colour and life to the damp, hot, and sombre appearance of the forest glades. Parrots, parroquets, humming birds, black-spotted canaries, birds of paradise, and the exquisitely coloured fly-bird, are among the varieties exhibiting themselves in this natural aviary.
In the highlands, besides large herds of cattle, thou-
sands of sheep, llamas, alpacas, goats, vicunas, chinchillas, and ponies are found browsing on the hillsides. Deer, foxes, rabbits, and hares are also very numerous. There are about 800,000 head of cattle, $1,500,000$ sheep, 400,000 llamas, 120,000 alpacas, and 500,000 goats in the Republic.

## CONSTITUTION AND CIVIL SERVICE

The Constitution of Bolivia is based on the unitarian system of central government, there being two houses, one of Senators and the other of Deputies. The President is elected by popular vote for a period of four years.

Bolivia possesses a fairly extensive service for the transmission of letters, and belongs to the Universal Postal Union. The charge is ten cents for inland postage and twenty-two cents for every fifteen grammes sent abroad.

It is interesting to note that newspapers and printed matter of all kinds circulate free in the interior of the Republic. This should prove exceedingly useful to British merchants having agents in Bolivia and wishing to circularize with matter printed in Spanish in the interior of the country.

The telegraph system is approximately six thousand kilometres in length, and connects most of the important cities and many small towns on the main routes. The charge for inland messages is fifty cents for ten words.

Bolivia is connected to the great cable-net by the telegraph lines of Chile, Argentina, and Peru. There are seven wireless stations in various stages of construction.

## XII

## THE REPUBLIC OF BOLIVIA

## COMMERCIAL SECTION

Railways. River navigation. Means of communication. The United States and Bolivian Development. Foreign Trade. Absence of British Representatives. U.S. commercial propaganda. Imports and Exports. Currency, weights, measures and posts. Mining. Laws relating to mineral concessions. Exportation of metals. Duty charged on minerals. Principal mining districts. Rubber estates. Rubber concessions. Peruvian slab and fine Para. Colonization. Land purchase and concessions. Public works and establishment of new industries.

Bolivia offers a wide and profitable field for the introduction of railways, immigration colonies, and the many other advance guards of western civilization. In a vast and naturally rich country already inhabited by several millions of people ( 50 per cent. natives) and yet practically destitute of railways, waterworks, factories, and the latest achievements of scientific progress, and also offering unlimited scope for foreign trade, the opening up of mines, rubber estates, and colonizing undertakings, it is easily seen what a magnificent field is offered for the investment of foreign capital and the employment of foreign labour. The United States has already taken advantage of this opening, and has sent millions of money and many " brains" to lay the foundation of the commercial armies which are now invading the country.

## RAILWAYS AND COMMUNICATIONS

There are at present about $\mathbf{1 , 4 0 0}$ miles of railway lines in operation and about 400 miles under construction or projected. Bolivia, being an inland State, depends for a means of communication with the sea coast upon the railways crossing the surrounding States from the Atlantic and Pacific littorals.

The principal routes to and from Bolivia, all of which are either already connected by rail and river navigation or else soon will be so, are as follows :-

## From Chile.

Arica to La Paz, 208 miles.
Antofagasta to Oruro and La Paz, 736 miles.

## From Peru.

Mollendo to La Paz (via Lake Titicaca), 563 miles.

## From Argentina (Transcontinental).

Buenos Aires, Rosario, Tucuman, and Salta, via Tupiza (Bolivia) to Potosi, Oruro and La Paz, 2,000 miles.

There are also several short lines completed or in course of construction connecting the principal towns of Bolivia. One of these being the line running from Oruro to Cochabamba, a distance of $\mathbf{1 3 3}$ miles. Another which is not yet un fait accompli is the line to run from La Paz to Puerto Pando, at the head waters of the Rio Beni, from which point river navigation is possible with Mañaos and Para on the Brazilian Amazon.

The Montã̃a, or forest region of Bolivia, which crosses the eastern half of the country, contains the principal portion of the navigable rivers, many of which are connected with the great Amazon which runs to the Atlantic

Ocean. Through communication between the rivers Beni, Madeira, and Amazon, is only interrupted by the nineteen falls on the Rio Madeira. A railway line to connect the two navigable portions of this great fluvial highway, and so afford through communication with Brazil, was commenced some years ago.

River Amazon Route.-This runs from Villa Bella, a port and custom-house station of Bolivia, at the confluence of the Marmoré and Beni, where the Madeira River commences. The whole voyage to the Atlantic Ocean is made in river steamers and canoes, transhipment into ocean liners being effected at Para City, Brazil.

The greater part of the trade of the Department of the Beni, and of the north-east region of the Republic, passes over the Amazon. The distance from the Bolivian fluvial port of Villa Bella to Para on the Atlantic is 3955 kilometres.

River Paraguay Route.-This runs from Puerto Suarez and Puerto Pacheco down the Paraguay and Rio de la Plata to the Atlantic Ocean. The little ports on this route are comparatively new, having been opened to meet the demand for the commercial development of the east and south-east of Bolivia. A railway from Santa Cruz de la Sierra to Puerto Pacheco is projected, and when this is completed the River Paraguay will become one of the most important ways for the conveyance of merchandise from the Atlantic to the eastern portion of the Republic.

The Arica route serves the Departments of Oruro, Cochabamba and the capital. The Antofagasta route takes the bulk of the trade of the Departments of Chuquisaca, Potosi, and the southern portion of Oruro, and part of that of Cochabamba. The Mollendo route
serves the city of La Paz , and the region surrounding Lake Titicaca, including the mining district of Corocoro. The Argentine route takes some of the trade of the Department of Tarija and a part of that of Potosi and Chuquisaca, but this is a long and expensive route.

Communication within the Republic is afforded principally by the 6000 miles of navigable rivers which cross the country in all directions. Other than this, and the few main railway lines, the only means of transit is by horseback or coach along the high roads, 2,400 miles in length, which connect all the important towns of the country.

At varying intervals along these roads the Government have placed posts, or rest-houses, for the convenience of travellers undertaking long land journeys.

The line from Arica on the Chilian coast, to La Paz, crosses the heights of the Andes, on the last stages of its journey, at an altitude of about 15,000 feet, previous to which the desert of Atacama has to be traversed, necessitating a complicated system of water supply for the engines. It is a remarkable feat of engineering and a wonderful scenic line.

It may be of interest to give here the beginning of American railroad interests in Bolivia in the words of the then (1910) Bolivian Minister at Washington.
" For the first time United States capitalists are taking an interest in the construction of railways in that section of South America. The Argentine roads were built with English capital, and the same is the case with those of Brazil and Chili, where the majority of the roads are Government property. Peru constructed her railways with national funds, but had to cede them for a term of years to her English creditors. Bolivia, then, is the
first country where, in co-operation with the Bolivian national resources, American capital is being invested.
" It has been my aim, and I had the good fortune to succeed in interesting representative New York bankers in the great work of giving life to my country by means of roads through rich deposits of minerals, and open to the world her virgin forests. My Government has concluded directly with the bankers a contract that is to-day being executed."

The lines to be constructed (1910) by the American syndicate are from La Paz to Tupiza, 530 miles; Oruro to Cochabamba, 133 miles; and La Paz to Puerto Pando, 200 miles; in all 863 miles.

Of these railroads the one from La Paz, passing by Oruro and Potosi to Tupiza, will form the chain uniting the republics of the Pacific with those of the Atlantic, besides traversing the richest metallic zone that exists, perhaps, in the world. The line from Oruro to Cochabamba will open to commerce the fertile valleys of the interior of that section, the most thickly populated of Bolivia, and make that part of the country accessible to the navigable branches of the Mamoré.

The railroad from La Paz to Puerto Pando, a port situated at the headwaters of the Beni, will open the territories of the Beni, where rubber grows in abundance, also coffee, and all the most precious tropical products, as well as the various classes of woods. This railroad will have the peculiarity of passing in a few hours from the frigid zone of the high plains, where there is practically no vegetation, to the tropical region of the orange and the sugar-cane. In a distance of less than thirty miles the traveller will be transported, as if by magic, from a temperature of perhaps forty degrees or less,
to one of seventy degrees or more, as he descends through wonderful scenery to the other side of the great eastern chain of the Andes." ${ }^{1}$

One advantage accruing to railroad proprietors in South America, and especially in Bolivia, is that every year their lines become more valuable owing to the steady increase in the population, and to the education of the masses, which causes them to discard the old methods for the new.

In countries above the normal temperature the disposition is to avoid, as far as possible, all forms of violent exertion. This is especially noticeable in the southern countries of the New World. It is no pleasure for a South American to undertake a long journey on horseback, because he has always travelled that way and consequently has grown tired of it; this mode of transit compels exertion, often during the heat of the day.

For these and many other reasons, South America will doubtless always be essentially a railway country.

The Government of Bolivia would consider the granting of concessions and also land for the construction of railway lines upon the most advantageous terms.

## MINING

Minerals.-The mineral wealth of Bolivia, although but little exploited, is very great. In the highlands, or temperate zone, large deposits of gold, silver, and copper are known to exist ; tin has also been found in consider-

[^6]able quantities. In this region, emeralds, opals, and jasper have repeatedly been discovered.

Previous to the war with Chili Bolivia owned the rich province of Atacama, in which the famous nitrate fields are situated. These immensely rich lands were, however, ceded to Chili in 1882.

The mining laws of the Republic allow any one to prospect on public lands which are not utilized, or on private estates which are not fenced in. No previous licence or concession is required by prospectors before commencing to search.

To obtain a concession of land for mining purposes, it is necessary to file a petition, and upon the granting of the patent an average charge of five bolivianos is demanded by the Government. Mining concessions are in perpetuity, being subject only to the payment of the patent fee of five bolivianos per hectare per annum.

The following five articles of the mining laws of Bolivia give the most important conditions imposed by the Government upon prospectors and mine owners:

All persons who are in possession of their civil rights can obtain, by means of one concession, one or more mining properties in mineral lands already known, and no more than thirty in lands where mineral wealth has recently been discovered. The mining properties which are the subject of one concession shall be contiguous and have no vacant spaces between them, so as to show that the limits of one coincide exactly with the limits of the others which are adjacent on any side.

Mines are real estate, and constitute a property different from, and independent of, the land in
which they are situated, even if their owner and the owner of the tand are one and the same person. The ownership, possession, use, and enjoyment of a mine can be transferred or conveyed exactly in the same way as all other property, subject, however, to the provisions of this law.

The unit of measurement to be used for these concessions, that is, an individual mining property, is a solid figure, having for its basis a square 100 metres on each side measured in the direction indicated by the petitioner, and of indefinite depth.

Sands which carry gold or tin, and all other metallic productions, to be found in rivers or placer mines in vacant lands, whether belonging to the State or private individuals, shall be subject to concession and adjudication in the same way and with the same formalities as all other mines. (The cost of the patent for the mining properties referred to in the above paragraph is two bolivianos.)

Mines of precious stones shall be subject to the provisions of the general law relating to mining until special regulations concerning them are made.
Mining is, and undoubtedly will remain for many years, the staple industry of Bolivia. In every department of the highlands, beneath the rocky surface, some kind of valuable mineral may be found. Even the, at present, isolated position of this country, which increases the cost of freight to such an extent that coals worth twenty shillings per ton at the coast cannot be purchased for less than five pounds for the same quantity at the mines, has not succeeded in preventing Bolivia from attaining the position of the second largest tin producing
country in the world, and the place of third importance among the silver producing states. The average exportation of pure tin is 36,500 tons. Antimony ( 18,000 tons), copper ( 23,000 tons), and bismuth are also very largely produced.

These figures, to which may be added the average annual production of gold- 500 kilos-show clearly the great prosperity of the mining industry of Bolivia, notwithstanding the difficulties of transport. If these figures represent the mining activity of the past few years, what will they amount to during the next ten? Such a question would be difficult to answer, for the railroads, cut through the great Andean range, will bring in their trail capitalists from all the countries of the world eager to exploit the hidden wealth, the latest mining implements, and, by far the most important consideration, will reduce very materially the length of the journey and the cost of freight.

The duty charged upon minerals is as follows:
Gold.-The exportation of gold in any form whatever is free from duty.
Silver.-Eight cents per marco.
Copper.-One boliviano per quintal.
The principal mining districts are :
Potosi, Oruro, and La Paz for tin and bismuth; Huanchaca, Oruro, San José, and Potosi for silver; Potosi, Cochabamba, Oruro, and La Paz for copper. Gold is mined over a very wide area along the course of the Andes.

## FOREIGN TRADE

Little can be said regarding the foreign trade of Bolivia, which is principally conducted through Chili and Peru. The United States supplies the bulk of the foreign imports in the form of railway and mining material. There is in this country a wonderful field for British commercial enterprise. It is a naturally rich mineral State of three million inhabitants, whose wants are rapidly increasing with the coming of a new prosperity, and there are scarcely any British commercial houses with representatives or travellers in the country, although the United States is flooding the market with agents, propaganda, samples, and attractive catalogues in Spanish. A few British commercials occasionally find their way into Bolivia from Chili and Peru, but such haphazard methods are quite insufficient to compete with the organized effort of the United States supported by her railroad enterprises. To make matters worse there was in pre-war times no British Diplomatic Representative resident in Bolivia.

The approximate annual value of the imports into Bolivia is $£ 2,500,000$, and of the exports $£ 7,400,000$. The principle articles exported in order of value are, tin, antimony, copper, bismuth, silver, gold, wool, rubber, coffee, and cocoa. The average annual value of the tin exported is four millions sterling.

Currency, Weights and Measures, Posts.-The principal medium is the Boliviano of 100 centavos. $=389$ of the U.S. dollar, and 12.5 to the pound sterling. The metric system is in general use in all the large towns, but in the country districts the old Spanish measures are much
used, especially the $a r r o b a=25 \cdot 3$ pounds, and the quintal $=101 \frac{1}{2}$ pounds. There is a good mail service in the principal towns, a telegraphic net connecting with the system of the surrounding States, a wireless station, and a parcel post.

## SPECIAL COMMERCIAL LAWS.

The Bolivian laws have been compiled from the Spanish and French codes, and are similar to those of the other countries of Spanish America. There are but few of a special character which materially affect the commerce of this large but backward inland state. The exportation of live vicuñas, alpacas, and goats, is strictly prohibited, as is also the unauthorised importation of matches, the sale of which is a State monopoly.

## RUBBER ESTATES

The considerable increase in the demand for rubber during recent years has given a great impetus to the cultivation of rubber trees in all parts of tropical South America. Bolivia, owing principally to the lack of adequate means of transport, has not yet received her full share of this newly-found prosperity, although Sir Martin Conway calculates that in the Beni country alone there may be as many as $50,000,000$ rubber-bearing trees.

The laws relating to the acquisition of rubber estradas contain the following important clauses :



THE PLAZA AND CHURCH OF MADONNA, POTOSI.


MUNICIPAL AND PREFECTURAL PALACES, POTOSI.

Every native or foreigner has the right of exploring the uncultivated woods of the Republic in search of rubber trees or other vegetable products.

The ownership of trees producing india-rubber, and of the land on which they are situated, is adjudicable by the State.

The adjudication will be made by "estradas," or groups of 150 trees, the parties interested having to set forth their claims in hectares.

Every person to whom a claim is granted shall pay for each " estrada" the sum of fifteen bolivianos, payable in fifteen annual instalments of one boliviano.

Default of payment of the annual instalment will occasion the loss of the prospective right to definite ownership, and if payment is in default for one year, the State will re-assume the ownership of the "estradas."
Peruvian Slab.-The tree which produces this substance (of a similar nature to rubber) has nothing in common with the rubber tree. The latter rises from the ground with a perfectly round trunk, and grows to a height which varies from thirty to fifty yards. It has a trifoliate leaf, which is single and simple. The caoutchouc tree, from which the Peruvian Slab is obtained, as a rule has huge roots rising above the surface of the ground. Its leaf is compound, and measures half a yard in diameter, having on either side of the stalk other thick leaves, which give to it a most singular aspect. The bark has a glossy surface, and may be either white or gray. Hence the denomination of black and white caoutchouc. It grows on hard soil as well as on mountain
slopes. It is hardly ever found in the proximity of rubber trees.

Like the rubber tree, it grows more abundantly in some places than in others, and the wider apart the trees are the larger their size is. The industry of collecting and preparing caoutchouc has now been established for several years all over those parts of Peru watered by the rivers which flow into the Amazon. The caoutchouc produced is, in appearance, similar to that obtained in Central Africa. The process of curing it is much more simple than that of rubber.

To obtain the latex the tree is cut down, and as many incisions as the trunk will admit are immediately made in it ; the milky juice then flows from these to the ground. The coagulation is then effected by mixing either lime or potash with the juice. A few days later the strings of caoutchouc are pressed together into larger masses or biscuits. After the tree is cut down the stump shoots up again the following year, and grows so rapidly that five years afterwards the same operation can be repeated. Such is not the case with the rubber tree, which, being very delicate, is easily destroyed by the slightest injury to the wood, and never grows again.

The market value of Peruvian Slab is about one-half that of fine rubber. Caoutchouc trees abound in the neighbourhood of the Bolivian rivers, where the soil is hard, and the collection of this product will no doubt be increased as the rubber becomes exhausted, or when labour is more easily obtained and the rates of transport are cheaper.

Fine Rubber.-This is the name given to india-rubber of the finest quality, which in the Liverpool and New

York markets is known as " Fine Para Rubber." The processes originally used at the commencement of the industry have been gradually improved upon until certain fixed rules have been established, which now form the backbone of a large industry. Rubber collecting was commenced in the islands of the Amazon. From these islands it spread out to the forests on the banks of the great river and its tributaries, the district of the Madeira being that which has attracted most attention. The average annual exportation of rubber is 5000 metric tons.

## COLONIZATION

The attraction of a stream of healthy European immigrants is of vital importance to all undeveloped countries, and, recognizing this, the Bolivian Government offers every facility to suitable applicants for land upon which to form colonies, or to individual immigrants who may be desirous of becoming settlers in the country. ${ }^{1}$

Free concessions of land are not granted unless it is intended to construct public works thereon, and, when this is the case, full particulars must be submitted for the approval of the Government and Technical Commission.

Land, within sixty kilometres of inhabited centres, which is granted or sold for the establishment of immigration colonies, is divided into lots of twenty-five hectares each, and no single person may own more than three separate lots in the same zone. Immigrants

[^7]acquiring land under these conditions are compelled to cultivate at least a sixth part of each lot within the first four years.

Where a large tract of land is required for cultivation or cattle breeding, it must be situated at a considerable distance from towns or important villages, and can then comprise an extent of from one to ten square leagues. The maximum number of these concessions which can be purchased by one person or company is limited to ten.

The purchase price of large areas of ground can be paid in instalments, one-fifth in ready money, and the remainder by annual payments of four equal instalments.

The Government of Bolivia is willing to accept as payment for large tracts of land the State bonds for the last national war loan at face value.
This résumé of the laws governing colonization, and the sale of public lands, gives a general idea of what is offered and imposed upon immigrants and agricultural and pastoral companies.
The many concessions which would be granted by the Bolivian Government for the introduction of new industries, and for the establishment of public works, are impossible to name, but a description of what would be granted to British capitalists desirous of exploiting the natural riches of the country is contained, as far as possible, in the preceding pages.

In bringing to a conclusion this description of a vast and rich country situated in the centre of the "Golden West," it is advisable to point out that although Great Britain has a special Commercial Treaty (1911) with Bolivia, the merchants and financiers of this country have not as yet given the same consideration to Bolivia as they have to many of the other States of Latin America.

## XIII

## THE UNITED STATES OF VENEZUELA

## GENERAL DESCRIPTION

The Federal Republic of Venezuela is situated on the north-east coast of South America, and has frontiers with Brazil and Colombia to the south, British Guiana and the Atlantic Ocean to the east, Colombia to the west, and the Caribbean Sea to the north. It is composed of twenty States, two national Territories, and the Federal District of Caracas, the capital. The estimated total area of the Republic, is just under 400,000 square miles, with a population of $2,844,000$. In comparative area it is larger than Great Britain, France, Holland, Denmark and Norway combined, but the density of its population is little more than seven persons to the square mile, and it is, from the point of view of economic development, far behind Argentine, Brazil, Chili, Peru, Uruguay and Colombia.
Venezuela, as a separate political entity, was formed by secession from the United States of Colombia in 1830 ( $q . v$.) and its life as a republican nation has, up to recent years, been a stormy one. For the nine years 1899-1908 it was ruled, or rather misruled, by the despotic Ex-President Castro, who not only retarded the national development of the country, placing
vexatious obstacles in the way of all foreign commerce and enterprise, but also embroiled the young country with almost every European nation as well as the United States of America. He was, while on a visit to Europe, succeeded by General Juan Vicente Gomez, who successfully effected a coup d'etat, in 1908. The new chief of state was strongly supported by all foreign nations having maritime or trade relations with Venezuela.
Notwithstanding its many political vicissitudes this country has a strong claim to historical renown. Caracas, the capital, was the birthplace of two of the greatest figures in South American history: Miranda, "The Emancipator," and Bolivar, "The Liberator." Its coast-line on the Spanish Main was the scene of many of the epic fights of the buccaneers and smugglers in the sixteenth and seventeenth centuries, and its cities still retain, in a more marked degree than those of any other South American State, their old colonial aspect of picturesque antiquity amid tropical fertility.

The four hundred thousand square miles of territory forming Venezuela is divided into two parts by the great river Orinoco and its tributary the Rio Apure, running from east to west of the country. In each of these divisions there is a mountain system. The littoral has a double chain known as the Maritime Andes which joins the Sierra Nevada de Merida. In this range there are many peaks which rise above the lofty snow-line, reaching a height of 15,180 feet. The mountain system on the continental side of the great dividing river is formed by a chaos of sierras traversing areas of little exploited country in all directions.

Topographically, as well as, in part, climatically, this country may be divided into three zones: (1) the

Northern Region ; (2) the Central Region ; and (3) the Southern Region. For the purpose of description here each of these natural divisions will be treated separately.

The Northern Region.-This tract of country comprises the coastal belt, the Maritime Andes, and the Sierra Nevada; (the islands of the Venezuelan coast.) It is that portion of Venezuela lying to the north of the Rio Orinoco, and includes the Federal District of Caracas, the capital of the Republic. Climatically it is warm, but not too hot, and is decidedly healthy for its situation within the tropics. It is economically the most exploited portion of the country and supports nearly three-quarters of the entire population.

Besides including the centres of population and maritime, commercial, and industrial activity, it also possesses the richest agricultural lands. Coffee, sugar-cane, cocoa, maize, cotton, fruit and beans, are largely grown. There are some 31,000 coffee estates covering about 200,000 acres of land ; 4060 cocoa plantations, and 10,700 sugarcane fields. The latter are participating in the worldwide prosperity of the sugar producing industry, and are rapidly increasing in numbers, area, and equipment. Three new central refineries have recently been established, near Lakes Maracaibo, Valencia, and one in the Federal District of Caracas. Maize, which forms a staple food of the labouring classes, is largely cultivated, and as many as four crops are harvested in the year, but notwithstanding this fertility of soil a large quantity has to be annually imported for home consumption from North America. Among the fruit cultivated are pine-apples, bananas, and guavas, all of which form important articles of export.

On the coast there are two rainy seasons, December and January, and April to July. In the mountainous region of the Maritime Andes and the Sierra Nevada the rains are far heavier than on the coast, but the heat is much less. At the port of La Guayra, the temperature is high and at times almost insufferable, but Caracas, the capital, which is elevated 3000 feet above sea level, enjoys a climate of perpetual spring with warm sunny days and cool nights. Parts of the Venezuelan lowlands are extremely unhealthy, but the climate of the highlands is by no means injurious to the health of Europeans or North Americans, although sanitation is still a neglected science in all the cities of this naturally rich country.

The Central Region.-This portion of the country is formed by the "llanos" in the valleys of the Orinoco and Apure rivers, and is a pastoral zone. These natural pastures have a total area of over 150,000 square miles, and extend, on both sides of the great waterways, from east to west of the country. The open prairies are interspersed with forests, and the climate is decidedly tropical. The rise and fall of the Rio Orinoco, causing the inundation of vast stretches of country along its banks, is somewhat prejudicial to the health of white men living permanently in close proximity to the river, but on the more elevated prairie-lands the climate, although hot, is not altogether unhealthy for the tropics. There are two seasons, six months of wet season, when the rains are intermittent and heavy, but of short duration, and six months during which rain is almost unknown and the heat is great. The alluvial flats of the Orinoco delta are decidedly unhealthy.

There are about four million head of cattle and live stock feeding on the rich pastures of the central zone,
but the number is decreasing instead of increasing. Some thirty years ago there were $10,500,000$ head of cattle in Venezuela, of which about $8,600,000$ were situated on the ranches of the llanos. Long continued political troubles have no doubt been the primary cause of the decrease, but past statistics afford some idea of the number of animals which these immense tracts of country will conveniently support.

The Southern Region.-This is the land of almost unexplored, and quite unexploited, forests and sierras, which stretch away southwards to the frontiers with Brazil and Colombia-a part of that great dead heart of equatorial South America mentioned frequently in previous chapters.

The principal products of this vast area of forests, rivers and mountains, are rubber, caoutchouc, balatá (a gum similar to rubber), tonga beans, vanilla, copaiba, cinchona, and angostura. All of which grow wild, and are collected by the natives in small quantities. In the district lying to the south-east of Ciudad-Bolivar, which is the commercial emporium for the southern region, and near the frontier with British Guiana, the famous mines of the Callao were discovered in 1875. These mines had produced gold to the value of about four millions sterling by the year 1887. There are indications of great mineral wealth in this part of the country, which, as yet, has been but little prospected.

Rivers and Lakes.-There are 72 large rivers with a total navigable length of over 11,000 miles in Venezuela. The most important of these are the Orinoco and the Apure, which have a navigable length of 4182 miles, and have 400 small tributaries. Steamboats maintain a regular service on these two rivers and also on the

Portuguesa, connecting Ciudad-Bolivar with the river ports of the interior. Sea-going vessels are able to enter and cross that vast inland sheet of water 8000 square miles in extent known as Lake Maracaibo, and Lake Valencia is also navigable for shallow-draught vessels. There are, in all, about 200 lakes and lagoons in this portion of South America, many of which are, however, merely inundated marshes, and useful only as breeding grounds for mosquitoes.

The Gulf of Cariaco, with its seaport of Cumana and the anchorage of Puerto-Cabello, are also well sheltered waterways. La Guayra, the principal port for the loading and unloading of cargoes leaving or entering Venezuela, owes its importance to the railway to Caracas, the capital, more than to its sheltered position or mild climate. It is generally believed to be one of the hottest places in the world.

Llanos.-The llanos, or levels of Venezuela, need but little description, although they vary from rich prairie lands with a hot, moist climate, to vast stretches of sun-scorched desert. They extend from the mountains of Parima to the Maritime Andes near Caracas, and have an area variously estimated at from 150,000 to 280,000 square miles.

Many parts of these great plains present during the dry season an aspect of sunburnt desert over which the slightest breeze causes a dust-fog. There are a few clumps of trees, which rarely attain the dignity of forests, and over wide stretches nothing seems to grow except the moriche palm. Here and there are patches of rock, and in the far distance the mirage of lakes and cities in a brazen sky. When the rain comes the whole scene changes with startling rapidity, some of the land is
inundated by the tropical deluge, and when the floods pass the desert is converted into a veritable garden of flowers and grass. Rivers appear from channels of mud, and there is food and water in abundance for both man and beast.

Paramos.-The paramos, or summit plateaux, which have an elevation of about $10-12,000$ feet, are situated on the Sierra Nevada. Cultivation extends up to about 9000 feet, and the line which separates such temperate crops as wheat and barley from tropical products may be placed at about 4000 feet.

GOVERNMENT AND POLITICAL DIVISION
Venezuela is a Federal Republic, composed of 20 autonomous and politically equal States. The Constitution is that promulgated on June 13th, 1914. There is a Congress composed of two Chambers; the Senate and the Chamber of Deputies. The Senate has 40 members, two from each State, elected for three years. The Chamber of Deputies is composed of members elected directly by the people at the rate of one Deputy for every 35,000 inhabitants, and one additional member for every 15,000 in excess of the standard number. The executive power is entirely in the hands of the President of the Republic and a Cabinet of seven responsible Ministers.

The States, being autonomous, each have their own Legislative Assembly, President, and General Secretary. They are divided into districts and municipalities, which have their own communal junta. The Federal District is administered by a Governor appointed by the President
of the Republic, and the two National Territories are administered in the same way.

The twenty States with their capitals and estimated populations are as follows :-


RELIGION, EDUCATIONAL, AND LEGAL SYSTEMS
The State religion is Roman Catholic, but all other denominations are permitted by law to exercise their religious customs and beliefs. Education is free and
nominally compulsory, and the system has been much improved and extended during recent years. There are universities at Caracas and Mérida. There are Federal Courts in Caracas, and each State has a Supreme Court, a Superior Court, Courts of First Instance, and District Courts. The municipalities have local courts, and both Federal and State judicial authorities, from the Pro-curator-General downwards, are appointed for three years.

## THE CAPITAL

Caracas, the Federal capital, is situated about 23 miles inland, by railway, from the port of La Guayra, on the Caribbean Sea. It has a population of about 73,000 , and stands on a plain elevated 3000 feet above sea level in an amphitheatre of mountains rising to over 9000 feet.

The plain, or Valley of Caracas, is watered by mountain streams which pass through the city and empty themselves into the Guaire River. The climate is rendered comparatively mild by the elevation, and the inhabitants enjoy a very long succession of summer days and cool nights. Although only a few miles distant from the sea, at La Guayra, the climate of Caracas is entirely different from its near-by seaport, which is frequently insufferably hot and stifling. The railway line from the low-lying coast, which is shut in by lofty mountains, runs for a few miles along the narrow sea coast, then turning inland, it ascends the mountains at a gradient of 1 in 28. Beautiful views are unfolded by every turn of the line, as it winds and climbs. The temperature drops with every 500 feet ascended, and a soft breeze
from the Spanish Main blows in through the carriage windows. On the first plateau stands Caracas, and behind is a semi-circle of more lofty mountains with snowcovered paramos.

The capital of Venezuela is a place of interest and antiquity. It was founded by the Conquistadore Losada in 1567, and called by him Santiago de Leon de Caracas. Being more or less secured from the raids of pirates by the steep mountain barrier it remained unfortified, and only once was it successfully assaulted from the sea, when the English buccaneer, Amyas Preston and his men crossed the cordillera by a neglected Indian footpath and captured the city by surprise. On March 26, 1812, Caracas was almost totally destroyed by a severe earthquake, which is supposed to have killed 15,000 people in a few minutes. In this way the old colonial city was destroyed, and there are now few buildings more than a century old.

Although of comparatively modern construction, with electric tramways, clubs, theatres, cinemas, hotels and shops, and laid out on the American plan with numbered (not named) streets running in parallel lines, north, south, east and west, it nevertheless possesses an atmosphere of antiquity which is probably due to the narrow streets, open patios, iron-barred windows, and single-storey white buildings. A splendid view of this red-tiled city, plentifully intermingled with palms and water-courses, may be obtained from the summit of Calvario hill, rising to a height of 200 feet. The slopes are laid out as a public garden, approached by broad carriage drives ; and stone steps lead to the summit.

The favourite evening promenade is, however, the beautiful Paraiso, a public garden of palms and flowers,
in which a military band plays under the tropical moon, on the banks of the Guaire River. Here may be seen the equestrian statue of President Paiz, the hero of the War of Emancipation and the first President of the Venezuelan Republic.

Caracas was the birthplace of Miranda and Bolivar, and relics of the latter are numerous. In the Plaza Bolivar stands the fine statue of the Liberator, near-by is the Museo Bolivar, with weapons, letters, uniforms, a jewelled snuff-box presented to the national hero by George IV., a gold and diamond sword presented by the goldsmiths of Lima, Peru ; the baptismal font, and a host of other relics of the central figure of South American history. A short distance from the Plaza is situated the Panteon, wherein those of Venezuela who have deserved well of their country find a last resting place. It is surrounded by the tombs of famous figures in the stormy history of the country, and in the midst of them all is the casket containing the ashes of what was once Simon Bolivar, who was born in this city in 1783 and lived to liberate from the oppressive yoke of Spain not only bis own country, but also Colombia, Ecuador, Bolivia, and Peru.

## CHIEF TOWNS

About La Guayra, the principal seaport of Venezuela, little of interest can be said, for it is a tropic town with an oppressively hot climate. It was discovered by Columbus in 1498, and possesses a good harbour constructed by an English company. It lies at the foot of the lofty Cordillera, which comes down almost to the water's edge and shuts in the town from the land side.

Its population is comparatively small, and its chief claim to importance lies in the fact that it is a port of call for most of the steamships trading on the Spanish Main, and is the sea-coast terminus of the railway to Caracas, the capital.
The principal towns of the Republic, other than those already mentioned, with the States in which they are situated, are as follows:


There are some fifty towns of over one thousand inhabitants, and over one-third of the entire population of the country reside within the municipal areas.


Photo. R.M.S.I. Co.
THE HARBOUR, LA GUAYRA.


Photo. R.N.S.P. Co.
R.M.S.P. "ALMANZORA."


Photor. I.M.s. P. ro.
GENERAL VIEW, CARACAS.


Photo R.s.S.I. I'O

## XIV

## THE UNITED STATES OF VENEZUELA

## COMMERCIAL SECTION

From an economic standpoint Venezuela may be said to have awakened from her lethargy in 1910, about two years after the overthrow of the despotic President Castro. Up to this date the difficulties which had attended foreign commerce, enterprise, and immigration, had so retarded the exploitation of this naturally rich country as to cause it to fall far behind nearly all its neighbours of the sub-continent. Political troubles added their quota to the retarding influences, and the unjust and antiquated laws completed the almost oriental isolation of Venezuela, while around her the young nations of the New World were expanding, developing, and progressing at a truly remarkable speed.

As an example of this period, which was so encumbered by vexatious and even ridiculous anomalies, that many years were required to even partially clear the country of their hampering influences, it is interesting to note that in what was then Article VII. of the Law of Waste Lands, neither the Federal nor the States Governments guaranteed to a purchaser of national land either the undisputable ownership or the delimitation of his property. In fact a purchaser did not know where his
estate commenced or ended nor if it really belonged $t$ him at all. A paragraph of the Civil Code exempter revolutionaries from the operation of justice, excep for personal acts of violence. This brilliantly conceiven legal enactment caused revolution promoting to becom a recognised and honourable profession. One of th last acts of President Castro was to expel the Dutcl Minister at Caracas "for endeavouring to dissuade hi fellow countrymen from emigrating to Venezuela," an the United States had been so grossly insulted by thi petty tyrant that the Government of that great country sanctioned a naval demonstration, and even a landing by Dutch troops in Venezuela in spite of the Monro Doctrine. Likewise, the British Empire, France, Spain and almost every country had suffered from the curiously arrogant and short-sighted administration of this on backward South American State.
The first indication of a change came shortly after th overthrow of President Castro in 1908. In 1910 th Executive ordered the publication of a Monthly Tech nical Review dealing with the means of communication within the country, in which occurred the following admission:-"Whereas the condition of most of ou means of communication in the Republic is absolutely rudimentary-a circumstance which largely contribute to the agricultural and commercial stagnation of the greater part of our territory . . ." In 1911-19 many o the laws were changed, a statistical service inaugurated and revolutionary propaganda suppressed. Venezuela i now ripe for development, and it offers an almost un limited field for foreign enterprise.

## MEANS OF COMMUNICATION

There are about 550 miles of railways in operation in Venezuela, comprising twelve different lines which were built at a total cost of approximately eight millions sterling. The principal of these lines run from La Guayra to Caracas, the federal capital, and from Puerto Cabello, the next most important Caribbean port, to Valencia, Miranda, and Caracas. There is also a line running inland from different points along the coast (see map). Three lines radiate from the shores of Lake Maracaibo in the extreme west of the Republic. From this short survey it will, however, be apparent that there is no organized system of railway communication in this vast country of 400,000 square miles and nearly three million people. Until recent times there were also no proper highroads, but during the past five years many hundreds of miles of more or less firm open roadways have been constructed and many of the large towns are now connected by this means. The road-making policy of the present administration is a sound and vigorous one.

What Venezuela lacks in the way of railways she certainly possesses in the form of navigable waterways. Conservative estimates place the number of her rivers and streams at 472 , of which 72 are navigable, and represent over 11,000 miles of fluvial highway. The great Orinoco and its tributary, the Apure, alone afford 4182 miles of continuous navigation. The only way of expeditiously reaching the Venezuelan interior is by river. There are steamer services on many of the navigable waterways, and a regular service connects Ciudad Bolivar with the far interior. Lake Maracaibo,

8000 square miles in area, has its own navigation system, and is also open to sea-going vessels. Lake Valencia is crossed by shallow-draught vessels, and only the Sierra regions of Central Venezuela can be said to be altogether inaccessible for the purpose of commerce.

La Guayra is 4255 miles distant from Southampton, England, and can be reached from New York in about ten days.

## FOREIGN COMMERCE

Venezuela has but very few industries, the bulk of the manufactured goods required by her $2,800,000$ inhabitants being imported. Salt and matches are government monopolies. There are cotton mills at Valencia, Caracas and Cumana, and coarse fibre sacking is manufactured in many parts of the country.

The average annual value of the imports into Venezuela is approximately $4 \frac{1}{4}$ millions sterling, and that of the exports five millions. In 1911-12 the British Empire headed the list with imports to the value of $£ 1,115,521$, and practically maintained the lead in this respect until the outbreak of the Great European War. During this period the trade between Venezuela and the United States grew rapidly in value, until the imports totalled 3 millions sterling per annum, and the exports $2 \frac{3}{4}$ millions. The trade with the British Empire during the same period (up to 1918) averaged $1 \frac{1}{2}$ millions sterling, made up of imports into Venezuela, one million, and exports from that country to the United Kingdom and Colonies, half-a-million. Spain comes third in the list with a total trade of $£ 700,000$, and France fourth with a volume of commerce representing $£ 620,000$.

The principal articles exported from Venezuela with their approximate annual average values in bolivars (francs) are as follows:-Coffee ( 64 million bolivars), cocoa ( 23 million bolivars), hides ( 10 million bolivars), gold ( 7 million bolivars), rubber and balata ( 5 million bolivars), cattle ( $1 \frac{3}{4}$ million bolivars), aigrettes, asphalt, copper ore, sugar, leather, pearls, tobacco, frozen meat, feathers, etc.

The chief articles of import are : cotton cloths, flour, machinery, medicines and drugs, sewing threads, rice, wines, butter, kerosene, and iron manufactures.

Monetary System.-By the monetary law of June 15th, 1918, the coinage is to proceed of gold pieces of the value of 100,20 , and 10 bolivars; silver pieces of the value of 5,2 , and 1 bolivar and 50 and 25 centisomos, and nickel pieces of $12 \frac{1}{2}$ and 5 centisomos.

The standard coin is the gold bolivar ( 0.290323 grammes fine gold) which has the same value as the French franc. It is divided into 100 centisomos. There are, at normal exchange, 25.25 bolivars to the pound sterling, but during the European War the exchange rate was approximately 20 bolivars to the pound sterling. There are a large number of bank notes in circulation having face values of 1000 to 10 bolivars. The value of the former is, in English currency, just over £39, and of the latter, eight shillings. There is, however, another monetary standard, the "Fuerte" or dollar, which is a unit of account, and is equivalent to 5 bolivars (silver) $=4 \mathrm{~s}$.; two and a half bolivar pieces in silver $=1 \mathrm{~s} .11 \frac{3}{4} \mathrm{~d}$. ; two bolivar pieces, one bolivar ( $9 \frac{1}{2} \mathrm{~d}$.), and half a bolivar, called a real, and a quarter bolivar, called a medio, and nickel coins called cuartellos ( $1 \frac{3}{4}$ d.) and centavos ( $\frac{1}{2}$ d.). The metric system is the official standard for all weights and measures.

## AGRICULTURAL AND PASTORAL INDUSTRIES

About 75,000 people are engaged in these two industries in Venezuela. The areas under the various crops and the export of the agricultural staples are as follows :-

Coffee, 200,000 acres. Value of export 64 million bolivars.
Cocoa, 5,100 plantations. ," " 23
Sugar, 10,800 (3,000 tons).
Rubber and balata (a large amount collected from wild trees). Value of export - - - 5 million bolivars.

The live stock in the country is estimated to be approximately as follows :-

| Oxen - | - | - | - | - |
| :--- | :--- | :--- | :--- | :--- |
| Sheep - | - | - | - | - |
| Goats - | - | - | 180,000 |  |
| Horses | - | - | - | - |
| Mules - | - | - | 200,000 |  |
| Asses - | - | - | - | - |
| Pigs - | - | - | - | 300000 |

The above figures are estimates, and are not based on a modern census. A new census of live stock is shortly to be taken.

## MINING

Although the actual mineral output of Venezuela is comparatively small, the latent mineral wealth of this vast country is undoubtedly very considerable. A wide area of the Central Cordillera and of the almost unknown south has never yet been awakened by the prospector's hammer or the miner's pick.

The gold production averages about 900,000 grammes per annum. The output of copper ore is approximately 42,000 tons, and of coal 20,000 tons a year. The gold is found in many parts of the country, both in banket formation and as alluvial deposits in many rivers; the copper is also widely distributed but is being worked, principally, in the districts around Caracas, Carupano, and Barquisimeto ; coal mines are in operation at Coro, in Falcón State, and at Naricual ; lead, antimony, tin, and iron, occur in many parts of the Caraib mountains, but are little worked; sulphur is found near Cumana; petroleum to the amount of about 50,000 tons is annually produced in the Sierra Merida and around Lake Maracaibo ; asphalt, which is chiefly exported to the United States, comes from Lake Bermudez; the famous salt mines which exist in many of the States are now being worked by the Federal Government (monopoly) and yield a total revenue of about $5 \frac{1}{2}$ millions bolivars per annum.
In addition to this mining activity on the mainland of Venezuela, pearl-fishing is largely carried on around the Island of Margarita and the near-by islets; phosphates are taken from the natural deposits in the islands of the Roques, Aves, and Orchilla, and deposits of guano exist in considerable quantities.
This backward South American State needs only capital and enterprise to more than double its mineral output within a very few years. There can be little doubt that fortunes await the determined prospector with capital in Venezuela. Until the recent political awakening little in the way of systematic prospecting was possible of accomplishment in face of the restrictions, insecurity, and lack of mechanical transport, roads and
labour, but now that a more enlightened and progressive administration is seriously taking in hand, with national funds, the provision of transport facilities, and parts of the country hitherto almost inaccessible are now opened up, there can be little doubt as to the mining future of this rich mountainous State. The mining code has been sensibly amended, and guarantees to the discoverer the right of exploitation and ownership on the payment of reasonable taxes. There are, however, several clauses in this law which still need drastic revision, and so little has been done by Venezuela to make its natural riches known in Europe and North America, that there can be little wonder that the mining communities are, in large measure, still ignorant of the possibilities offered in this neglected State.

## FINANCE AND POSTAL SERVICE

Taken over a period of five years the average annual revenue is approximately $£ 2,248,967$, and the expenditure $£ 2,042,399$. During the two financial years 1916 and 1917 the revenue and expenditure balanced, and were less than the two previous years. The total indebtedness is just under six millions sterling. (Four millions external.)

There are over 300 post offices scattered over the country, with about 6000 miles of telegraph wires. The telephone system extends over the settled areas, and is in the hands of an English company. The length of lines in operation is just under 13,000 miles. The mail transit from England occupies about 21 days, and from New York 11 days.

THE UNIVERSITY, CARACAS, VENEZUELA.


PLAZA INDEPENDENCIA, MONTEVIDEO.


RAMIREZ, A SEASIDE REGORT IN CVUGUAY.

## XV

## THE REPUBLIC OF URUGUAY

## GENERAL DESCRIPTION

The fortunes of this now prosperous and settled Republic have been varied in the extreme. Formerly a colony of Spain, an outlying province of the Spanish Empire, it was united early in the eighteenth century to the Argentine Confederation, afterwards being annexed by the Crown of Portugal, and later becoming a portion of Brazil. With the dawn of the nineteenth century the national spirit of patriotism rose like an angry sea, ruffling the tranquil surface of the whole country, and, owing to the bravery of the famous "Thirty-three," Uruguay was able to proclaim its independence on 25th August, 1825. This caused the war between Brazil and the Argentine Confederation, but owing to the mediation of Great Britain war ceased and all nations agreed to recognize the Republic of Uruguay as a Sovereign State.

The area of this country, which until recent years was known as the Banda Oriental, is approximately 72,112 square miles, being about two-thirds the size of the British Isles. Not a large country if compared with several of the other nations of the New World, but one favoured by Nature climatically, geographically, and topographically. It has a population of $1,400,000$.

Its fortunate position on the east coast of South America, at the mouth of the famous Rio de la Plata, assures for it in the near future a prosperity with which several of the more western countries of the Continent, being so much further removed from the commercial centres of Europe and the United States, will find it hard to compete successfully. It is bordered on the north by Brazil, on the east by the Atlantic, on the west by the river Uruguay, and on the south by the river Plate.

Topographically, Uruguay is a well-watered country; hilly, but not mountainous. Its natural features ensure to the Republic a brilliant future. On the wide stretches of fertile grass lands sheep and cattle can be reared in such quantities, and at so comparatively small a cost, as to make this country a pastoral paradise.

Although much of the capital and labour in Uruguay is devoted to cattle-breeding and sheep-farming on a large scale, the Departments of the south are par excellence agricultural regions. In the provinces of Maldonado, Canelones, and Colonia there are many prosperous agricultural colonies ; notable among which is the Swiss colony and the Valdenese, which is composed entirely of Italians.

The Republic of Uruguay is divided into nineteen Departments, viz., Montevideo, Canelones, San José, Florida, Colonia, Flores, Durazno, Maldonado, Rocha, Soriano, Rio Negro, Paysandu, Salto, Artigas, Tacuarembo, Rivera, Cerro-Largo, Treinta-y-Tres, and Minas.

## CLIMATE

This country, which is one of the most healthy in the world, has a climate not unlike that of Italy. The weather reports show an average of 244 sunny days out of the 365 in the year. In outward aspect Uruguay much resembles England during the summer months, being a succession of low hills and dales covered with grass and the varied foliage of a warm though not even semitropical climate.

The one feature which the country lacks is forests; only in the north and west do thick jungles break the monotony of the prairies. Unfortunately, the wholesale destruction of trees, which has already levelled the forests of the south, now threatens the north and west, and unless the Government prohibits this short-sighted massacre, Uruguay will lose not only an important climatic and financial advantage, but also her greatest natural beauties.

The absence of epidemics of tropical or contagious diseases shows conclusively the natural healthiness of the climate, and should prove a powerful factor in the inducement of European immigration.

What Uruguay most needs is healthy and industrious immigrants to people the vast tracts of land which remain uncultivated owing to the sparseness of the population. In the whole Republic the population averages only nineteen per square mile, whereas in Great Britain there are approximately 320 inhabitants per square mile.

Most of the European settlers in Uruguay belong to the Latin race-Spaniards and Italians heading the list. But the climate is eminently suitable to all Europeans,
and there is no reason why thousands of immigrants from the crowded centres of the Old World should not profit by the broad expanse of fertile but unpopulated land which forms the prairies of Uruguay. The commerce with Great Britain represents 25 per cent. of the whole trade of the country, imports and exports combined; all the railways and many of the public works are constructed with British capital, and it may truly be said that of all the countries of South America Uruguay is the most British (with a strong French tendency).

## MONTEVIDEO

Montevideo, the capital and chief port of the country, is conveniently situated at the mouth of the Rio de la Plata, and is the emporium of the State.

The whole city is lighted by gas or electricity on the most modern principles ; the streets are well paved with granite blocks, and the new drainage system places it on a level with European cities. Pure water is supplied from the works on the banks of the river Santa Lucia, over thirty miles distant from the city. Perhaps the most important undertaking of recent years was the construction, by a powerful French syndicate, of the new port of Montevideo. These works have cost sixty million francs, and the capital of Uruguay now possesses one of the finest harbours on the east coast of South America.

Another feature worthy of mention is the admirable tramway system which connects every part of the city. One hundred and fifty miles of lines are already laid, and during recent years many of these lines have been
electrified with eminently satisfactory results. The average number of passengers conveyed annually is forty-five millions.

The Montevideans are hospitable and cultured ; many of the educated classes being perfectly conversant with several modern languages, among which English and French are usually included. The inhabitants of the capital have had the privilege of admiring many of the operatic and dramatic celebrities of the world, including Patti, Salvini, Rossi, and Sarah Bernhardt; there are several places of amusement, the principal of which is the Solis Theatre, a fine, well-lighted building, equal in every respect to many of those in European cities.

The British residents in Montevideo possess a fine club in Constitution Square. The regatta, which takes place annually between the English rowing clubs of Buenos Aires and those of Montevideo, arouses much interest in the capital ; and there is a sporting association which arranges cricket matches and race meetings at frequent intervals. The English in the capital also possess a church, hospital, and cemetery.

The suburbs are splendidly laid out on the SpanishAmerican principle, with broad avenues lined with trees, and many fine houses standing in their own gardens, which abound in semi-tropical foliage, plants, and flowers. The natural beauty of many of these gardens can only be compared with the floral displays in the finest hot-houses of Great Britain. The houses themselves are mostly two-storey buildings of massive architecture with commanding entrances.

From the "azoteas," or flat roofs, fine views of the many picturesque gardens in the vicinity can be obtained. Many of these roof-gardens are prettily laid
out with flowers ; and the vine, which grows everywhere, is frequently used as a substitute for awnings for protection against the sun during the long summer.

Many of the seaside suburbs of Montevideo have been converted into small but fashionable watering-places, possessing all the attractions peculiar to continental seaside resorts in Europe.

During the summer season, which lasts from October to February, these pretty little places, several of which are only a few miles distant from the capital, are much frequented by all that is best in Montevidean society ; casinos, bathing establishments, military bands, tea gardens, and fêtes may be numbered among the many attractions offered by the seaside suburbs of the capital.

Besides Montevideo the other important cities in Uruguay are, according to their commercial status, Salto, Paysandu, Maldonado, Rocha, Mercedes, Florida, and San José. These cities cannot, however, be compared with the capital either in size or in respect to modern improvements.

GOVERNMENT, PRESS, ETC.
Constitution.-Uruguay has adopted a system of Government much like that of all the States of South America. There are three separate powers : the Executive, composed of the President of the Republic, who appoints six Secretaries of State; the Legislative, or Senate, whose President is the Vice-President of the Republic ; and the House of Representatives. Senators and Deputies are elected by universal suffrage, and the President of the Republic by the National Assembly for a period of four years.

The Press.-The Press of Uruguay enjoys full freedom, and is guided by Spanish-American journalists of ability. Among the English newspapers circulating in the Republic must be mentioned the Express, the Uruguay Weekly News, and the Montevidean Times, all of which have central offices in the capital.

Postal and Telegraph Systems.-The postal and telegraph systems are fairly good, and are being constantly extended. It must be borne in mind when carrying on correspondence with this country that although the fee charged for ordinary letters from England to Uruguay is only $2 \frac{1}{2} d$., homeward bound correspondence is charged at the rate of 5 d . per half ounce. Neither letters nor parcels can be registered.

Steamship Lines.-Steamship communication between Great Britain and Uruguay is well maintained by the following lines : The Royal Mail Steam Packet Company, Limited, Messrs. Lamport and Holt's line, the Highland line, the Houlder line, the Houston line, the Nelson line, and the Prince line.

## THE "CAMP"

Many people have an erroneous impression that nearly every part of South America is uncultivated, diseaseladen, and almost always in a state of civil war. This is not the case. Most of the large cities of the Continent are modern in style, and possess all the latest improvements. That they are cosmopolitan is true, but, nevertheless, the bulk of the inhabitants are cultured and highly educated. Needless to say in the interior, in the mining camps or on the nitrate fields, it is frequently
somewhat different. Here one may find the renegade as depicted or caricatured in many works of fiction.

The "camp" or prairies of Uruguay, however, are more civilized than the interior of several of the other countries. This can partly be accounted for by the fact that many railway lines of penetration now traverse the far interior. Another potent reason is that many of the large land-owners in this country are of English, Scottish, or French descent, and they, no doubt, have had a salutary effect upon the more volatile and quick-tempered Spanish, Italians, and Indians who predominate in many of the other countries.

The gaucho, or cowboy, of the Uruguayan prairies often wears a most fierce expression, which is augmented by the sombrero, riding-boots and heavy cattle whip, without which he is rarely seen; but in reality he is most inoffensive and far less dangerous than many of the inhabitants of the more deserted spots in Europe. He is generous and hospitable to a marked degree, and above all is a fine horseman.

Away from the towns and railroads, nearly everything is accomplished on horseback. Even the newsboys and postmen ride. It is no unusual sight, though often an amusing one, to see the local priest riding to church.

Life on the grass seas of the Banda Oriental is now very different from what it was in the days when the cattle were wild, and used to roam at will over hill and dale. Nearly all the large ranches are now fenced in and the horses and cattle are by this means being gradually tamed. In the old days the life of a cowboy on these vast plains was truly an exciting and dangerous one. The cattle-thieves, " broncho-busters," and stampedes have so often been the subjects of romance that
it would be superfluous to dwell further upon these scenes which are now fast passing away.

The wooden bungalows of the early settlers have been replaced in many cases by solid brick buildings; the estates fenced in with wire ; and the whole country-side has assumed a more peaceful and settled aspect.

## THE RIVER URUGUAY

The great River Uruguay is a continuation of the famous Rio de la Plata, and forms the frontier between Uruguay and Argentina. On its broad bosom the bulk of the merchandise from the interior is borne to the sea. It is navigable for vessels of 14 feet draught as far as Paysandu, and much further for vessels of only 8 feet.

A voyage up the Uruguay in one of the small river steamboats is full of interest. In a single hour the aspect of the stream may have changed from a broad shining streak with low banks on the distant horizon, to a narrow, muddy, and swift running river with its edges covered with the tangled growth of ages. On the upper reaches of the river, near the Brazilian frontier, the climate becomes semi-tropical.

In the morning the banks are shrouded in damp mist, and as the sun mounts higher in the heavens the weedfilled river shines like a bar of gold. The vegetation on the banks changes from the light green of temperate climes to the bright and vivid colour of semi-tropical regions; tall palm trees rise majestically above the lesser growth, and orchids peep from beneath the exuberant foliage.

The several hundred miles of navigable river are so
filled with islands of various sizes that in many parts it is impossible to tell where the mainland commences, or at which point an opening will be found for the steamer to penetrate. Another curious sight is formed by the masses of weed which float lazily on the surface, making the water look muddy and uninviting.

The numerous small schooners and bataloes, on the lower section of the river, testify to the increasing trade of this great fluvial highway. The banks are everywhere studded with the white roofs of "Saladeros," or jerked beef factories, from which small wooden piers project into the water.

The great danger to small craft sailing on the lower reaches of the river, and more especially on the Rio de la Plata itself, is caused by the sudden and violent storms which sweep the surface of the water. In a remarkably short time these cyclones, or " Pamperos" as they are called, cause the surface to become a mass of foamcrested waves, and being usually accompanied by vivid lightning and thunder, they do considerable damage and are much dreaded.

The Rio Negro, a tributary of the Uruguay, is navigable for ocean steamers as far as the important town of Mercedes. There are several other streams navigable for shallow craft, and the total of 700 miles of fluvial highways supplements the 1600 miles of railway, which combined affords a means of transport to and from all parts of the State.

## XVI

## THE REPUBLIC OF URUGUAY

## COMMERCIAL SECTION

Foreign commerce. British trade. Articles of import and export. Currency, weights and measures. Railway system. Industries. Cattlebreeding. Agriculture. Part played by British and American capital. Estancia lands. Cost of land per acre. Areas under different crops. Railway concessions. Waterworks and mining.

## FOREIGN COMMERCE

Although Great Britain had succeeded in maintaining commercial supremacy in Uruguay up to the year 1914, German enterprise was rapidly gaining ground. In less than ten years it had risen from a negligible quantity to a place second only to that of Great Britain. The United States, also, had more than doubled her commerce with the Republic during the same short period, and both France and Belgium had made rapid advancement, the latter country ranking fifth among the competing nations in 1913.

The result of this rivalry was that although British trade still maintained its volume it did not increase in ratio with the wonderfully rapid rise of the total foreign commerce of Uruguay. It is customary for many writers and politicians when discussing the rise and fall of British trade to conveniently ignore the vitally important
increase in the total trade of young and rapidly developing nations such as those of South America, wherein a decade frequently makes a difference of many millions sterling in the value of the imports and exports.

If a true appreciation of the commercial position of Great Britain in South America is required then the value of her annual trade must be taken not only in comparison with that of other competitors, but also in comparison with the total foreign commerce of the various countries for the same period. For example it is entirely misleading to say that because Great Britain maintained commercial supremacy in Uruguay that her trade with that country was entirely satisfactory. On the contrary, much that could have been obtained was actually being lost. Fifteen years ago Great Britain supplied about 70 per cent. of the entire imports; this gave her a long lead which was gradually being lost as the total trade of the Republic increased, until in 1918 it had dropped to 25 per cent., and during the war period to a place but little above that of the United States notwithstanding the entire elimination of German, Austrian, Belgian, and much of the French and Italian trade with this country.

It is true, however, that in pre-war years the exports from Great Britain to Uruguay exceeded the imports by an average annual value of $£ 1,500,000$, and amounted, in approximate value, to $£ 3,000,000$ per annum out of a total import trade of $£ 8,500,000$. But, as far back as 1907, Great Britain supplied $£ 2,900,000$ worth of imports against a total import trade of $£ 7,365,703$. Thus the gain was only about $£ 100,000$ in an increase of Uruguayan trade of over $£ 1,000,000$.

The total foreign commerce of Uruguay in the year

1916 was $£ 21,279,925$ (imports and exports), of which the trade with Great Britain amounted to $£ 5,800,000$, and with the United States to $£ 4,260,000$.
The principal articles of import in order of value are : foodstuffs, sugar, cotton cloth, hardware, coal, dry goods, drugs, cattle, yerba maté, lumber, coffee, fruit and vegetables, corn, boots and shoes, machinery, medicines, charcoal, electrical apparatus, alcohol, beans, wheat, and salt.
The principal articles of export by value are : meats and extracts, wool, hides, animals, agricultural products, fats, grain and seeds, minerals, flour, bristles and bones.
What was it that enabled Germany and later the United States to increase their trade with this country so rapidly?

The reply cannot be given better or more accurately than in the words of Mr. R. T. Kennedy, His Britannic Majesty's Minister at Montevideo. "At the risk of repeating well-known advice, I am bound to warn British traders that they must ' wake up' and become less conservative in their attitude, and more adaptable in their procedure. They must watch the market, study the people, learn their wants, acquire a knowledge of the language, and when they have done all this, they must endeavour, like German merchants, with ready eagerness to meet and satisfy those wants and requirements. Above all, catalogues, and advertisements, labels and directions on goods, prices, weights, and measures, should always be translated into the Spanish language, which is spoken not only in Uruguay, but by over $30,000,000$ people in the two Americas. Advertisements in local newspapers should be freely resorted to, and
the fatal practice of employing foreign agents and foreign travellers to represent British interests should be abandoned wherever it is possible to replace them by British subjects who will take the trouble to learn the language and to study and respect the idiosyncrasies of the people with whom they wish to transact business. It must be remembered, too, that there are goods which are best sold because of their exceeding cheapness, regardless of the fact that they do not last and have often to be replaced. I refer specially to articles of feminine apparel, whose constant renewal, but not durability, is desired. German importers are adepts in the art of attractive packing and of 'getting up' their goods, and, above all, they give long credit and renewals. Six and nine months are the usual periods, with a discount of 5 per cent. if payments are effected within those periods, and there is, too, a readiness to extend the credit to twelve months if desired. British firms, on the contrary, never give credit for more than three months, of which at least one is lost, after receipt of the bills of lading, before the consignments actually reach the warehouses of the agents in Montevideo.
"We can learn much, too, in the same direction from our Italian and French competitors. The strong Parisian tastes and sympathies of the cultivated classes in this country are no doubt, together with their pleasant and tactful ways, powerful allies of French commercial representatives; but, on the other hand, it is gratifying to know that as a nation we are respected and esteemed, and that British subjects and British enterprises can count, so far as the Uruguayan Government and people are concerned, upon a fair field and upon fair treatment,
so long, at any rate, as they maintain that high standard of commercial morality which has given to the phrase 'La palabra de un Inglés,' the popular meaning of honest and straightforward dealing."

One final suggestion I should like to offer before quitting the subject of the foreign trade of this country, and that is that British merchants should bear in mind that Uruguay is geographically and politically a distinct country from Argentina, and they should, therefore, abandon the practice of appointing agents who reside in Buenos Aires to represent them, and to push their trade in Montevideo.

Currency, Weights and Measures.-There is no gold coinage in Uruguay beyond the number of foreign coins in circulation at their respective national values. The principal Uruguayan medium is the Peso of 100 cents. The exchange value is generally reckoned at 98 Uruguayan cents to the U.S. dollar. The metric system is in legal force, and there are but four old Spanish measures now in general use in the towns.

## RAILWAY SYSTEM

In face of the keen competition offered by the commercial rivals of this country in nearly all branches of Uruguayan foreign trade it is gratifying to observe that all the railways of the Republic are practically under British control, most of the lines having been constructed with capital drawn from the United Kingdom.

The total length of railways already in operation amounts, approximately, to 1,680 miles, and is
distributed principally between three main lines as follows:

Central Uruguay and extensions. North Western, Midland, and Northern. Eastern.

The Central Railway of Uruguay has recently been extended to Centurion on the Brazilian frontier where a junction has been effected with the Rio Grande Railway of Brazil.

This should tend greatly to increase the exploitation and commerce of north-eastern Uruguay, besides affording through communication between Montevideo and Rio de Janeiro, the capital of the United States of Brazil.

Several other lines are being either extended or connected up, amounting to about 370 miles of new construction.' When foreign nations grant concessions for the building of railway lines to substantial British or Colonial firms they do so because of the world-wide reputation for far-sighted and sound planning, combined with energetic and thorough workmanship, which characterize British constructors of railways in nearly all parts of the world. This may be seen in the many countries of South America, where British enterprise in this respect is placed in competition with that of other nations, the results being decidedly flattering to the former. Even Uruguayans themselves admit the comparative excellence of the system which has been profitably constructed in a land so sparsely populated, and are proud of their railways.

## INDUSTRIES

Cattle-breeding.-The principal industries of Uruguay are cattle-breeding and sheep-farming. So successful have these proved that agriculture, mining, and all else have been greatly neglected. Nothing has proved so profitable in this country as these two staple industries. There are approximately $8,000,000$ head of cattle, and no less than $26,000,000$ sheep feeding on the vast pasture lands which stretch nearly all over the country. There are also about 400,000 horses and 16,000 mules. For every hundred inhabitants there are, as near as it is possible to calculate, 600 head of cattle, and 2,000 sheep. One of the largest cattle-breeding estates in Uruguay is that belonging to a well-known English firm, Messrs. Liebig. This firm owns and rents about $1,120,000$ acres of land in Uruguay, Argentina, and Paraguay. At Fray Bentos on the river Uruguay it has established a large hygienic factory for making preserved meats and extracts.

Agriculture.-The success of the pastoral industries has undoubtedly much retarded the increase of agriculture.
In the Southern Departments, among the many kinds of fruit which grow in abundance, may be mentioned pears, peaches, plums, lemons, cherries, apples, and grapes. In the north, or semi-tropical region, cocoanuts, pineapples, bananas, and palm-fruit flourish. Quince trees are so abundant in many parts of the country that they constitute forests in themselves, and the making of quince-preserve forms an active and profitable industry.

At present but little land is under cultivation, although the yield per hectare sown with wheat averages 740 kilos. The agricultural colonies in south Uruguay are annually increasing in numbers and prosperity, but the population of the whole country is so small, when the vast extent of available land is considered, that unless the Government takes measures to divert a further stream of European immigration to Uruguay the rapid growth of the country will be much retarded. In the interior the average population scarcely amounts to one per square mile, which is distressingly low for a country so naturally rich. The area under wheat is about $1,000,000$ acres, and that under oats 145,000 acres.

It is opportune to say something of the chief drawbacks, both real and imaginary, under which many South American countries suffer.

The most dangerous enemy of all these countries is the belief, now happily only shared by the few, that civil war may at any moment break out-in which event neither the life nor property of Europeans would be spared.

In answer to this let it be pointed out that every year sees these comparatively young countries more settled in administration, as well as in public spirit. Revolutions have now become so few and far between that the risk is really less than that of earthquakes, epidemics, or railway accidents in other lands, and to Europeans not nearly so dangerous or destructive. The belief that the life and property of foreign residents are destroyed wholesale during these internal disturbances between two political sections is also entirely wrong. Seldom, indeed, even in the past, have either
foreigners or their property been in jeopardy. In future their inviolability will doubtless be observed even should there be any slight political disturbance, which, as far as Uruguay, Argentina, Brazil, Chile, Bolivia, Paraguay, or Colombia are concerned, seems every year less likely. This danger in all the countries of South America can therefore now be dismissed as entirely: an imaginary one.

The real disadvantage, however, under which not only Uruguay but all these countries suffer, is lack of agricultural labourers and mechanics. If these can be attracted to the South American Republics, their home trade will doubtless increase by leaps and bounds, and their general commercial development will be greatly stimulated. The foreign commerce, however, undoubtedly receives a great check from the high protective tariffs which are imposed upon nearly all imports. In Uruguay the export duties on many finished products are certainly excessive, and unless they are reduced the commerce of the country will suffer considerably. Were these duties lowered by all the South American countries, their foreign commercial activity would receive a great impetus.

## COMMERCIAL ASPECT

British and American capital, enterprise, and commerce, have ever been important factors in the development of the State of Uruguay. Much has already been accomplished by Englishmen and Americans on the vast prairies and in the cities of the Republic, but there remain few countries in the New World where better
opportunities exist, and where the Government is more favourable to enterprise.

For financial purposes this country should be looked upon as a fertile but sparsely populated tract of land, composed of an almost endless succession of undulating prairies, with one range of low mountains, the Cuchilla Grande, crossing the country from north to south, in the vicinity of which, and also in many of the rivers, mineral wealth has been proved to exist. A few railway lines, leaving immense tracts of rich pasture land unserved between them, completely cross the country. There is a magnificent sea-board on the Atlantic which, with the exception of the south (i.e., the ports on the Rio de la Plata), is as yet but little used for maritime purposes, owing in some cases to the peculiar nature of the coast and the shallowness of the water, and in many others to the lack of harbour facilities, even for coasting steamers.

For commercial purposes Uruguay is a nation of about one and a half million people who speak the Spanish language, ${ }^{1}$ and whose tastes and wants differ, among the various sections of the population, from the simple sombreros, coloured scarfs, and leather Hessians of the gauchos, to the refined and decidedly Parisian tastes of all the middle and official classes.

## ESTANCIA LANDS

Pastoral lands.-The great wealth of Uruguay lies in the rich soil and magnificent pasture lands which

[^8]cover almost the entire area of the country. Cattlebreeding is the most important industry of the Republic, the nature of the soil being exceedingly well adapted for breeding purposes. Experience has shown that seven sheep can be fattened on about one and a half acres, and it is therefore not surprising to find that an enormous amount of capital is invested in live stock.

The Government of the Republic of Uruguay make no free grants of land except for purposes of railway construction or for the establishment of much needed public works. The price of land is comparatively high when compared with several of the larger states of the Continent; and nearly all the land bordering the Rio de la Plata and Rio Uruguay has now become private property. Large tracts of land for breeding or agricultural purposes can, however, be purchased at prices varying according to their proximity to, or distance from, a railway line or one of the main rivers. Lands situated some forty or fifty miles from any mode of transit can be purchased for about 50 per cent. less than the prices given in the following table, in whatever department they may be situated. It should be remembered, however, that estates bordering the river Uruguay, or other navigable waterway, are really more valuable than those bordering on the railway lines, as the rivers offer a much cheaper mode of transit, and ensure a plentiful supply of water. The following table shows the approximate price of land in each department of the Republic :


Agricultural lands.-The success of cattle-breeding and the lack of adequate means of transport has greatly retarded the development of agriculture, but during recent years this industry has rapidly increased, and the areas under cultivation in 1918 were as follows:

| Wheat - | - | - | $-1,000,000$ | acres. |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Oats - | - | - | $-145,000$ | ", |  |
| Linseed - | - | - | - | 37,000 | $"$ |
| Barley - | - | - | $-13,000 \quad$ ", |  |  |

The yield per hectare, which is approximately equal to two and a half acres, averages about 730 kilos, when sown with wheat; 742 kilos, linseed; and 641 maize.

The chief agricultural departments are Montevideo, Colonia, Canelones, Soriano, San José, Minas, and

Florida. There is no reason, however, except for the facilities offered for transport, why these departments should be better adapted for agricultural purposes than any of the more central ones.

There are several flourishing Spanish, Italian, and Swiss immigration colonies, situated in the departments of Colonia and Soriano. The establishment of bonâ fide undertakings of this kind would receive much assistance from the Government.

## RAILWAY CONCESSIONS

Uruguay, although only a small state if compared with its huge neighbours Argentina and Brazil, is already well served by a network of railway lines over 1680 miles in length. Junctions with the Brazilian lines have been effected, and the ports on the river Uruguay are nearly all connected by rail with the capital.

The first railway constructed in Uruguay was the Central, which is, even now, by far the most important line in the whole country. The original concession for the construction of this line, which may be taken as showing the general conditions governing the granting of railway concessions in Uruguay, was that the land belonging to the State ${ }^{1}$ was to be ceded to the company, and in addition the State guaranteed an interest of 7 per cent. on $£ 10,000$ per mile of railway constructed, provided the net receipts did not cover this interest. In return the company was to construct six miles of track within eighteen months, and a hundred and twenty miles in six years, unless the necessary funds for the completion of the line could not be raised.

[^9]The total number of passengers and goods carried annually over the lines of the various railway companies averages about $2,500,000$ and $2,800,000$ tons respectively.

There are, of course, fewer openings for new railway undertakings in this country than in several of the other South American States having much larger areas, with isolated mining districts or agricultural areas already opened up ; but, nevertheless, the rich pasture and agricultural lands of the interior, and the mineral wealth, as yet almost unexploited, in the departments of Minas and Tacuarembo, which are at present practically inaccessible for commercial enterprise, would form a promising field for the construction of railway lines, especially if worked in conjunction with Italian, Spanish, or Portuguese immigration colonies. Unless some provision were made for increasing the traffic on new lines it would be some years before thoroughly satisfactory results could be looked for, owing to the scantiness of the population.

The Government would favourably consider any satisfactory proposal for the construction of a railway line through the easily accessible territory of eastcentral Uruguay, or along the Atlantic coast. The country through which these lines would have to be laid is eminently suitable for railway construction; the absence of lofty mountains, tropical forests, and broad rivers, would reduce the cost of construction to a minimum, and simplify the after-working.

All applications for railway concessions must be placed before the Minister of Public Works, and the concessions must afterwards be ratified by Congress. The conditions are a matter of arrangement between

A WOOL STORE, MONTEVIDEO.


CATTLE ON THE WAY TO MARKET.

sCENE ON A U'RUGUYAN ESTANCIA.
the Government and the concessionaires ; but it should be stated here that the establishment of Italian, Spanish, or Swiss immigration colonies along various sections of the line is considered necessary ; and adequate financial guarantees must be given. Applicants for railway concessions who comply with these conditions will be most favourably received by the Government.

## WATER WORKS

The rapidly growing cities of Uruguay offer many good openings for the establishment of palatable water supplies. The original concession for the Montevideo Water Works, which belong to an English company, conferred the following privileges, which were to last for a period of twenty years:
(1) A monopoly of the sale of water in Montevideo.
(2) Freedom from taxation and import duties.
(3) A monthly subvention of 4,000 dollars.

The period of twenty years expired in 1891, and a new arrangement with the Government was made; the company being exempt from taxation and import duties, and the monthly subvention being reduced to 500 dollars.

## MINING

The mineral wealth of Uruguay has been much neglected, and but few prospectors have made systematic explorations in any portion of the country. Gold mining is, however, now being carried on in the departments of Salto and Tacuarembo, and copper and coal is also known to exist.

The discoverer of a mine has the right to claim a concession of sixty hectares of land when there is no other mine situated within a radius of one kilometre ; otherwise only thirty-six hectares are granted. The royalty on ores exported from the country is one-half per cent.

When looking to Uruguay as a field for enterprise, it should be remembered that the Government would grant valuable concessions and monopolies for the establishment of public works, systems of motor road transport and fluvial navigation services and, as will have been seen from the previous pages; this country offers not only a profitable field for the investment of capital, but also a magnificent and ever-increasing market for British manufactures.

## XVII

## THE REPUBLIC OF PARAGUAY

## GENERAL DESCRIPTION

This country, which has an approximate area of 196,340 square miles, and a population of about 800,000 , is situated in the southern portion of South America, being an inland state, surrounded by the Republics of Brazil, Argentina, and Bolivia.

Although without a sea-board, Paraguay possesses a magnificent hydrographical system which affords a direct and reliable means of communication with the Atlantic Ocean. The river Paraguay, which flows across the whole territory from north to south, dividing the country into two portions, called El Gran Chaco (western half) and El Paraguay Oriental (eastern half), forms the great fluvial highway for the maritime commerce of the Republic.

The river route, from Asunción, the capital of the State, to the open sea, follows the river Paraguay southwards for a distance of 300 miles to its junction, at. Tres Bocas, with the Rio Paraná, which is then descended for 800 miles, and the broad estuary of the Rio de la Plata forms the outlet to the ocean.

This remarkable combination of rivers, leading direct to the capital of Paraguay, is navigable for steamers of
moderate draught ( 12 ft. ), thus connecting this inland State with all countries of the world.

Eastern Paraguay, or Paraguay Oriental, which is by far the most inhabited portion of the country, is composed of a succession of low hills covered with vegetation, which extend to within a few leagues of the frontier; then come the dense virgin forests which encircle the north and east of the Republic, making communication by land in this direction a noteworthy feat of exploration.

The land bordering the Paraguay river and the valley leading from Asunción, the capital, to Villa Encarnación, form the inhabited eastern portion of the country, and here railway lines connect the various towns and villages.

Western Paraguay, or El Gran Chaco, as it is called, extends from the north-western side of the Rio Paraguay to the Bolivian frontier, and has an area of over 100,000 square miles. Although this large territory is undoubtedly very fertile, only a small portion is under cultivation. A wide area is covered by immense forests, but these are intersected by magnificent pasture lands of considerable extent. The extreme north of this huge plain is almost impenetrable owing to the many extensive swamps and lagunas filled with decaying vegetation, in which lurk alligators and many species of centipedes, scorpions, and snakes. The far-distant regions of this practically unknown territory are inhabited by several tribes of dangerous Indians; and the only towns of any importance whatever, situated in the Gran Chaco, are Bahia Negra and Villa Hayes, but several large cattle-ranches and farms are scattered over different portions of this territory.

El Gran Chaco, which is considerably the largest portion of the country, notwithstanding the fact that it is, as yet, practically uninhabited, is, without doubt, a most fertile region, and the central portion is eminently suitable for the establishment of immigration colonies owing to the salubrity of the climate, which can only be likened to a perpetual Mediterranean spring. The ownership of El Chaco has been disputed by Bolivia.

Paraguay is traversed by one range of low mountains, from the north to the south, named the "Cordillera de Amambay," which cuts across the Paraná river, forming the little-known Guayrá Falls. These falls, which were, until quite recently, almost inaccessible owing to their position in the midst of virgin forests on the Paraguayan north-eastern frontier, and have been visited by few white men, are among the largest and most magnificent in the world. The Rio Paraná, which above the falls attains a width of two and a half miles, suddenly contracts to seventy yards on the brink of a precipice about sixty feet deep. The swollen waters plunge over in a volume greater than that of Niagara, and swirl off amid a cloud of mist and spray through a rocky gorge into the depths of the boundless forests.

The two most important rivers which flow through Paraguayan territory are the Rio Paraná, which rises in the State of Goyaz, Brazil, and has a length of over two thousand miles, and the Rio Paraguay, which also has its source in Brazilian territory, and flows southwards for a distance of nearly two thousand miles to its confluence with the Paraná.

The principal ports on the river Paraguay, going from north to south, are Pilar, Port Casado, Villa Concepción, San Pedro, Asunción (the capital of the

Republic), Villa Franca, and Hiamaita, which is situated near the southern frontier. That on the Rio Paraná is Villa Encarnación, which is in the south.

The vast interior of Paraguay is principally composed of dense forests of giant trees covered with creepers and a variety of beautiful flowers. Few countries in the world can produce such a magnificent natural aviary as can be seen in these jungles. In many parts the trees, which are interlaced by the growth of ages, literally abound with the gorgeous plumes of birds, and a more magnificent scene than is here presented it is difficult to imagine. The wealth of these forests, however, lies in the rich yerbales, or groves of maté trees, and in the Quebracho wood from which the famous tanning extract is made.

The chief industries of the country are the collection and curing of the leaves of the mate tree and the extract of Quebracho. So valuable are these, that the export duties form an important item in the revenue of the country. The dried and powdered maté leaves are used throughout the whole of South America for making maté tea, the universal beverage of the Latin-American people.

## CLIMATE

The climate and health conditions of Paraguay vary considerably. In the Chaco many parts are uninhabitable owing to the mists rising from the swamps, but in by far the largest portion of the country the climate is exceptionally healthy. The average temperature at Asunción is about $70^{\circ} \mathrm{Fahr}$. ; the maximum in summer is $104^{\circ}$ Fahr. Frosts occasionally occur on the heights,
but snow is entirely unknown, even on the mountains. Thunderstorms, however, are frequent in all parts of the country. At times the sky blazes with electric flashes, lighting up with a peculiar brilliance the darkest recesses of the forests. There is little danger, however, from these atmospheric disturbances, and the rainfall is everywhere abundant during all seasons of the year ; for this reason a high point of vegetation is reached.

## CHIEF TOWNS

Asunción, the capital of the Republic, is situated on the left bank of the river Paraguay. This city, which is clean and fairly well paved, is laid out upon the general Spanish-American system, with the streets running at right angles to each other, and possesses several fine buildings, among which must be mentioned the Government Palace, Cathedral, Hospital, Theatre, and the comparatively new station of the Central Paraguayan Railway, which valuable property is owned by an English company.

The various portions of the city are connected by tramways, and an electric light undertaking has been established.

The houses of the capital are principally of one storey only, having flat roofs, which are often decorated with flower-beds and used for promenading in the cool of the early evening. In the suburbs, the fine residences are usually surrounded by gardens filled with a great, variety of flowers and fruit. The general appearance of Asunción is neat and attractive. It has a population of 120,000 .

Second in size and commercial importance comes Villa Rica, population 26,000, which is situated in the interior some ninety miles from the capital, with which it is connected by railway. The other most important cities of the country are: Paraguari ( 12,000 ), Villa Concepción ( 12,000 ), Villa Encarnación (12,000), San Estanislao, Luque, Caazapá, and Carapequá, all of which have over ten thousand inhabitants.

Paraguay, considering its size, has received a fair share of the great stream of immigration which is constantly crossing the Atlantic from Europe, and several thriving Spanish, Italian, and German settlements have now been established for many years. The largest and best known of these are San Bernardino, the lake-side summer resort of the best society of the capital, and Villa Hayes, so named as a compliment to the illustrious ex-President of the United States, to whom the frontier dispute with Argentina was submitted for arbitration, with the result that the rich country in which the settlement now stands was adjudged to be within the rightful limits of Paraguayan territory.

## CONSTITUTION

Since the Paraguayan War of 1870 the Constitution has been modelled on the United States form of Republican Administration-there being two Houses, one of Senators, and one of Deputies. Members of the former are elected by universal suffrage in the proportion of one for every twelve thousand inhabitants, and of the lower house one for each six thousand inhabitants. Senators are elected for the term of six years, butone-third
of their number are compelled to retire every two years ; Deputies only for four years, half their number being changed every two years.
The President of the Republic, and the Vice-President, who is also President of the Senate, are elected for four years.
Paraguay's gallant stand against the united forces of Brazil, Argentina, and Uruguay, although a deed of which any country might be proud, had disastrous results. The country was devastated, and nearly half the male population was killed during the three years of this war. Since then the Paraguayan standing army, which is partly composed of natives, has only consisted of about two thousand men; and her river gunboat flotilla comprises but few vessels, which are now mostly employed on revenue and police duty.
This protracted campaign greatly retarded the natural development of this small but rich State and the long continued political troubles which followed caused the cessation of business for several years, with the result that Paraguay has only quite recently entered upon her years of prosperity.

## XVIII

## THE REPUBLIC OF PARAGUAY

## COMMERCIAL SECTION

Railways and communications. Industries. Foreign commerce. Regulations regarding commercial travellers. Customs declarations. Concessions. Sales of public lands. Cattle-breeding. Mining. Currency, weights, measures and postage. Wireless stations, etc.

## RAILWAYS AND COMMUNICATIONS

Communication within the Republic is maintained by one important and well-equipped railway, the Paraguay Central, which has a length in operation of over 270 miles, running across the south-western portion of the State from Asunción to Villa Rica and Villa Encarnación on the Rio Paraná, which forms the frontier with Argentina. This river is crossed from Villa Encarnación on the Paraguayan side to Posadas in the Argentine by a train ferry from whence a direct line leads to Buenos Aires.

A branch line of the Paraguay Central is being constructed from near Villa Rica to the frontier near the Rio Iguassu, where a junction will be effected with the Brazilian Railways, and the journey from Rio de Janeiro to the capital of Paraguay should then be accomplished
in less than sixty-five hours. The first two sections of this line have already been opened for traffic.

Other branch lines of the Paraguay Central are either under construction or projected.

Railway Route from Buenos Aires to Asunción.-As predicted in the first edition of this book published in 1910 it is now possible to travel by through train from Buenos Aires, the seaport-capital of Argentina, to Asunción, the Paraguayan capital in the heart of South America. The total length of the journey is 1,518 kilometres. The trains are composed of sleeping and dining cars, and the journey is accomplished in about fifty hours, which time includes that spent in transporting the train by ferry across the Rio de la Plata and the Rio Paraná.

The route followed on leaving Buenos Aires is along the River Plate to Zarate, where a ferry conveys the train across this great river to Ibicuy. The line then strikes out for the interior in a northerly direction via Carbo, San Salvador, Los Libres, to Posadas on the Argentina frontier. Here the train is conveyed by ferry boat across the Paraná to a point near Villa Encarnación and the final run of 376 kilometres to Asunción is commenced.
River Route; Buenos Aires to Asunción.-Fluvial navigation affords the principal means of communication within the Republic. The two fine rivers, Paraguay and Paraná, which encircle the richest portion of the whole country, form magnificent natural highways for the conveyance of passengers and goods to and from the interior.
River steamers possessing in many cases all the latest improvements, and equipped with electric light and
fans, ply regularly between Asunción and Buenos Aires, the voyage occupying about five days. The down journey with the tide can, however, be accomplished in just over three days. Regular services by steamboats also place the capital of Paraguay in direct communication with Montevideo (Uruguay); Villa Concepción and Villa Encarnación (Paraguay) ; Corumba, Corrientes, and Posadas (Argentina) and Murtinho (Brazil).

## INDUSTRIES

Agriculture.--The most important industry of the country is agriculture, which has greatly increased during quite recent years. Nearly all the lands bordering the great rivers are now occupied, and also much of the southern portion of the interior.

The staple productions are maté, from the yerbales of the east, sugar-cane, tobacco, cotton, mandioca, Indian corn, coffee, rubber, fruit, rice, lumber, and the extract of Quebracho.

Cattle-breeding.-Cattle-breeding is largely carried on in the provinces of San Pedro and Concepción, also in the territory of El Gran Chaco. This important industry is exceptionally profitable in Paraguay owing to the low price of rich pasture land and to the salubrity of the climate in most parts. The success which attends cattle-raising is proved by the fact that after the war of 1870 only a few thousand animals remained alive, and to-day there are nearly three million head of cattle, two hundred thousand horses and mares, and half a million sheep feeding on the prairies of the Republic.

Minerals.-No effort has yet been made to exploit
the mineral wealth of Paraguay, notwithstanding the constant discovery by geologists and travellers, of iron, manganese, coal, copper, and other minerals in several regions. In the district of Caapucu, and in the Cordilleras, iron and manganese exist in large quantities, and the surrounding forest of giant trees would afford abundant fuel for smelting purposes.

At present, however, little is known regarding the best localities for mining purposes, as but few prospectors have searched any portion of the country; but the existence of extensive coal-fields in the south, and veins of copper in the north of the State, has been proved conclusively by repeated expeditions made for geological and metallurgical purposes by Government officials.

## FOREIGN COMMERCE

The foreign commerce of Paraguay is almost entirely conducted through the neighbouring Republics of Argentina, Uruguay and Brazil, as the River Paraguay is not navigable for ocean steamers as far as Asunción. Montevideo is the cheapest port for the transhipment of merchandise on its way to and from the Republic, although Buenos Aires receives by far the largest portion.

Under the circumstances it is but natural that Argentina should hold the premier place in the foreign commerce of Paraguay. Out of a total import and export trade of $£ 1,951,593$ (annual average) Argentina's share amounts to about $£ 1,086,721$, of which no less than $£ 753,150$ is the value of the Paraguayan exports to its
rich neighbour. The trade between Paraguay and Brazil is, however, comparatively small, and the same may be said of that with Uruguay.

Previous to the great war Argentina had increased her trade with Paraguay by nearly 150 per cent., the United States by about 56 per cent., Great Britain by 47 per cent. and Germany by 81 per cent. The British figures, however, do not include the increasing trade between Paraguay and the British Dominions.

It was in the year 1907 that Germany first obtained the lead in the import trade of Paraguay and with the exception of the years 1909-10, she maintained the premier place until the epoch-making year 1914.

During the war period, however, Great Britain again assumed the first place in the Paraguayan import trade, and in 1916 came second only to Argentina in the total volume of trade passing to and from the respective countries. In this typical war year the British imports into Paraguay amounted in approximate value to $£ 374,917$ and the exports to only $£ 16,671$. In pre-war years, however, British imports into Paraguay were valued at about $£ 380,000$ and if a portion of the German imports, which previously averaged approximately $£ 400,000$, is to be replaced in future years by British goods then somewhere about $£ 500,000-£ 700,000$ must be the value of British imports into Paraguay to meet even the present demand, and it should be noted that Paraguay is yearly increasing her foreign trade by at least twenty per cent. The secret of Germany's success in pre-war years was that she maintained six times as many commercial establishments in Paraguay as Great Britain, and, in addition, accepted, in return for her imports, some $£ 200,000$ worth of Paraguayan
produce against what was a negligible quantity imported by Great Britain.

The participation of the United States in the foreign trade of Paraguay both before and during the great war was comparatively small. In 1913 her imports were valued at $£ 38,000$, and in 1916 at $£ 115,010$, but at the time of writing she is making a gigantic effort in this country as throughout South and Central America, to obtain a large share of the lost German and Austrian trade in these wonderfully promising fields.

The principal imports in order of value are : textiles, foodstuffs, hardware, fancy goods, ready-made clothing, machinery and railway material, wines and spirits, glass and chinaware, arms and ammunition, hats, footwear, electrical goods and furniture.

The chief exports by value are: maté, Quebracho extract, tobacco, fruit, Quebracho wood, dried meat, hides, horns, cocoanut bran, and logs.

The production of Paraguayan staples has been steadily on the increase for many years.

Meat Extract Industry.-In order to encourage this industry in the Republic special concessions are granted of a very extensive character.

Customs Declarations.-It is important to note that declarations giving very full and precise particulars of goods must be handed to the Customs Authorities by receivers in Paraguay. As the officials receive all the fines inflicted for the smallest breach they are naturally exacting. This makes great caution necessary by foreign firms dispatching goods to Paraguay.

Commercial Travellers.-In Paraguay foreign commercial travellers must obtain a licence in each municipality visited for the purpose of trade. The
cost of these licences varies according to the standing of the firm or firms represented. Usually the amount payable is assessed by a board of local merchants. In the four principal towns of the Republic, Asunción, Villa Rica, Villa Concepción, and Villa Encarnación, the cost of a commercial traveller's licence varies (according to assessment) from $£ 15$ to $£ 75$ for six months. In the smaller towns about one-third of these sums must be paid. No extra charge is made when more than one firm is represented or more than one class of goods sold (beyond the assessment). It is important to note, however, that a separate licence is necessary for each municipality visited, and that travellers of foreign firms visiting a branch or agent resident in Paraguay need obtain no licence. No special charge or income tax is levied on the sales effected by travellers, and no special abatements are allowed by the Railway Companies or River Navigation services. As throughout South America the cost of living and travelling is high, and considerable credit is often required. (See Appendix.)

Currency, Weights, Measures, and Postage.-The principal medium is the paper dollar of 100 cents. The rate of exchange varies considerably.

The metric system is in legal force, but there are also several Spanish measures in general use, the principal of which are: the Cuadra=97 yards; the Cuadra (square) $=2$ acres (approx.) ; the Paraguayan league $=2 \frac{3}{4}$ miles; the Paraguayan league (square) $=7 \frac{1}{2}$ square miles: the Vara $=33.9$ inches.

The postal rates are those of the Postal Union, to which convention Paraguay was a signatory power. Letters are dispatched via Argentina. There is a parcel post, but neither letters nor parcels can be insured.

view of asunción.


IN THE PIRAPO FORESTS, CENTRAL PARAGUAY.


PATIÑO-CUE STATION-CENTRAL PARAGUAY RAILWAY.
an Excursion Train with a Band in one of the Old-Fashioned Third Class Open Coaches, which are now being superseded.

The cable rate from Europe varies from 2s. 9d. to 3 s . per word. There are wireless stations with a day radius of 1,000 kilometres at Asunción, the capital, Villa Concepción, and Villa Encarnación.

## PUBLIC LANDS

Paraguay is now in the early stages of commercial development, and needs both capital and labour to promote the exploitation of its natural riches. In exchange for these services the Republic has much to offer in the way of rich agricultural and pastoral lands, deposits of minerals, and profitable openings for all public works suitable for a country which, although fertile and to a certain extent populated, is as yet only in part developed.

Financiers and colonists will realize that countries in the making are mostly willing to make large concessions in order to induce the investment of capital and the cultivation of the soil, which means eventually increased revenue for the State; and Paraguay being no exception to this rule, the Government will look with favour upon all foreign enterprises which tend to the commercial development of the country. Although free concessions of land, except to immigrants and colonists, are not granted, the price of large tracts of country suitable for pastoral undertakings is placed at such a very low figure that persons and companies having for their object the acquirement of territorial extensions for any purpose would find it difficult to discover a country in which land could be more cheaply purchased.

All territory still remaining the absolute property of the Government is divided for the purposes of sale into five classes, according to its situation. The following list gives the names of the Departments in which the different classes of land are situated, together with the price per square league as fixed by the Government.

## FIRST CLASS LANDS

Departments.-San Lorenzo del Campo Grande, San Lorenzo de la Frontera, Villosa, Ipane, Guarambare, Villa Oliva, Emboscada, Villa Franca, Luque, Villa Humaita, Limpio, Ita, Villa del Rosario, Villa del Pilar, San Estanislao, Acahay, Tabapy, San Miguel, Arroyos y Esteros, Villa Concepción, Villa de San Pedro, Pirayu, San José, Caazapa, Itaugua, Aregua, Yaguaron, Atira, Barrero Grande, Altos, Ibitimi, Tobati, Villa Florida, Villa Encarnación, Villa Rica, Itacurubi de la Cordillera, Caacupe, Valenzuela, Quiguio, Paraguari, Carapegua, Caraguatay, Quiiadi, Caapucu, Ihacanguazu, Mbayapey, Ibicui, San Juan, Bautistu de las Misiones, Itape del Rosario.

Price per square league in hard dollars current funds, 1,200.

## SECOND CLASS LANDS

Departments. - Santiago, Lima, Laureles, Pedro Gonzalez, San Ignacio, Santa Maria, Ytu, San Juan, San Joaguin, Ajos, Carayao, San Pedro de Paraná, Jesus y Trindad, Santa Rosa, San Cosmo, Unión, Tacuati, Hiaty, Neponmuceno, Bobi, Isla Ombu, Tacuaras,

Yabebiry, Yatahity, San Juan, Bautista de Nembuen, Horgueta, Desmochados, Guazucua, Carmen de Paraná, Mbnayaty, and also the whole territory included between the confluence of the rivers Aquidaban and the Paraguay as far as the Rio Apa.

Price per square league in hard dollars current funds, 800.

## THIRD CLASS LANDS

Departments.-This class comprises the lands between the Pilcomayo river and Villa Concepción, in the Grande Chaco fronting the river Paraguay at a distance of ten leagues inland.

Price per square league in hard dollars, 300.

## FOURTH CLASS LANDS

Departments.-The lands of the fourth class comprise the stretch of country between Villa Concepción and the Pilcomayo river, in the Chaco.

Price per square league in hard dollars, 200.
Lands of the fifth class are those not referred to in the foregoing, and are mostly situated at a distance from the populous centres. The price being $\$ 100$ per square league.

Payment for land can be effected in four yearly instalments ; the first to comprise 25 per cent. of the total amount.

The cost of a cattle ranch, having an area of about four square miles, and stocked with one thousand animals,
including the cost of extra labour, erection of a wooden house and fencing-in, is estimated to be approximately $\$ 10,000$.

In Paraguay there are colonies of Swiss, French, German, Italian, Japanese, Spanish, and Portuguese, which are, in most cases, doing well.

There is a good opening for the establishment of industrial enterprises which do not require the employment of a number of highly skilled artisans, and which could profitably use the raw material of the country.

The principal manufactures at present are cotton fabrics, sugar, tanneries, pottery, rum, and Paraguayan lace, which is called nanduti owing to its resemblance in texture to the cobweb. This lace is a speciality of the country, being made solely by the Paraguayan women, who display great skill in the working of handkerchiefs, mantillas, curtains, and other useful, as well as ornamental, articles.

The import duty on merchandise not included in the free list ranges from 2 per cent. to 80 per cent. ad valorem; but the things most needed are admitted free of duty in order to encourage their importation. This often affords a ready way of telling whether or not certain articles are in immediate demand, and should, not only in this country, but in many others, prove a reliable guide to manufacturers as to what is novel and most required.

The only products subject to export duty are tobacco, maté, ox-hides, live animals and Quebracho extract and logs.

Paraguay has received only a very small portion of the British capital invested in South America, which
amounts approximately to the enormous sum of $£ 800,000,000$, not including the private investments of individuals, and in consequence has not attained the same standard of commercial development as many of the more favoured States. The only apparent reason for this, as the whole country is undoubtedly very rich, is its inland position, which till recent years made the difficulties of transport very great, and thus not only deterred colonizers from visiting the country to see for themselves what inducements it had to offer, but also placed many obstacles in the way of its natural expansion and development.

The linking up of the Paraguayan railways with those of Argentina, and the comparatively cheap steamboat communications, will give a great impetus to the commerce of the country. Financiers from all the European centres will, doubtless, turn their attentions to this new field for investment, and the competition will cause a rise in the price of agricultural, pastoral, and forest land, which forms the dormant wealth of the State. For this reason and many others those who desire to secure many valuable concessions should lose no time in applying for them.

## XIX

## THE REPUBLIC OF ECUADOR

## GENERAL DESCRIPTION

The Republic of Ecuador is situated on the north-west coast of the sub-continent and has a seaboard of about 500 miles on the Pacific Ocean. It has an estimated area of 211,430 square miles, including the Islands of Colon, and a population of about 2 millions. There is, however, in addition to this established territory, a vast tract of ill-defined and almost unexplored country, roughly estimated at 500,000 square kilometres, claimed and administered by the Republic, and situated in the valley of the Upper Amazon or, as it is called on the Pacific Slope, the Marañon.

Ecuador is bounded on the north by Colombia, on the south by Peru, on the east by Brazil, Colombia, and Peru, and on the west by the Pacific Ocean. The boundaries with Peru and Colombia have been fixed by arbitration.

The territory of this State extends from about two degrees north of the equator to six degrees south of the line, giving it a decidedly tropical climate on the lowlands of the Pacific littoral and in the vast interior, but traversing the entire country from north to south at a varying distance from the sea-coast are the lofty
and volcanic ranges of the Ecuadorian Andes, which cause a great variation of the climate of some of the more elevated and populous Provinces.

There are three well-defined regions, the hot and somewhat unhealthy coast lands, the sub-tropical highlands leading up to the eternal snows, and the vast equatorial forests of the Amazon valley. The snow-limit is at 4,742 metres on the Pacific Slope, and about 100 metres lower on the continental side. The average altitude of this section of the Andes is 3,500 metres. There are fourteen active and five extinct volcanoes.

Mountains.-The principal mountains and the provinces in which they are situated are as follows :-

| Mountain. |  |  | Altitude. |  |  | Province. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chimborazo | - | - | 6,310 | etres |  | Chimborazo. |
| Carihuairazo | - | - | 5,106 | " |  | " |
| Altar | - | - | 5,404 | " | - | " |
| Cotopaxi | - |  | 5,943 | " | - | Leon. |
| Illiniza - | - | - | - 5,305 | " |  |  |
| Cayamba | - | - | 5,840 | " | - | Pichincha. |
| Antisana | - |  | - 5,756 | " |  |  |
| Tungurahua | - |  | - 5,087 | " |  | Tungurahua. |

There are also a large number of mountains ranging from three to five thousand metres.

Rivers and Lakes.-The principal river is the Marañon, or Upper Amazon, with its tributaries the Yapura, Putumayo, Tigre, Napo, and Morona, which together form a wonderful system of river navigation through the vast and otherwise almost impenetrable forest region of the far interior. The Marañon affords through fluvial communication with Brazil and the Atlantic, crossing the entire Continent. There are also many smaller rivers, navigable in parts and during certain
seasons of the year, which flow into the Pacific Ocean from the coast Provinces of Ecuador. The principal of these are the Mira, Esmeraldas, and Santiago, in the north-west frontier Province of Esmeraldas. The first of these three rivers forms the frontier line with Colombia. The Chone, in the Province of Manabi. The Guayas, on the mouth of which stands Guayaquil, the principal seaport of the country, which is navigable by river steamers as far as Bodegas, 40 miles, and by boat during the rainy season to Zapotal, 200 miles. The Daule and Vincis rivers, both of which have steamboat services running inland for about fifty miles from the Pacific coast.

There are a large number of lakes in Ecuador, among which must be mentioned Micacocha in the Province of Antisana, and Majanda, in the Province of Imbabura. Both of which are encompassed by the most beautiful scenery.

## GOVERNMENT AND POLITICAL DIVISION

The Government of Ecuador is, under the Constitution of the State, divided into three powers, the Legislative, the Executive and the Judicial, and is Republican in form. The President is elected by popular vote, and is assisted by a Council of State composed of fourteen members which is a consultative body of the Executive. There is a Senate and a House of Representatives.

The territory of the Republic is divided into fifteen Provinces, which are subdivided into Cantons, Parishes and Municipalities. There is a Governor as head of each Provincial Executive, a Jefe-Politico in every

Canton and a Municipal Council for each important town. The State religion is Roman Catholic, and there is an improving educational system with Universities and a department of the central Government at the head.

There is in addition to the Provinces, the vast territory of the Marañon valley, known as the Region Oriental, the Colon Archipelago, and the special cantons of Canelos, Sangay, and Qualaguiza, in the Provinces of Tungurahua, Chimborazo, and Azuay, which are all governed by special laws.

The fifteen Provinces of the Republic, together with their capitals, average altitudes and temperatures, are as follows:-

| Province. | Capital. | Average <br> Altitude. | Average mperature. |
| :---: | :---: | :---: | :---: |
| Azuay - | Cuenca | 2,581 metres | 14.6 C . |
| Bolivar | Guaranda | 2,668 | 15 |
| Cañar | Azogues | 2,533 | 15.5 |
| Carchi | Tulcán | 2,977 | 12.9 |
| Chimborazo | Riobamba | 2,798 | 13.7 |
| El Oro | Machala | - 1,100 | 19 |
| Esmeraldas | Ermeraldas - | 1,500 | 19 |
| Guayas | Guayaquil | - (Chief Seaport, |  |
| Imbabura | Ibarra - | - 2,225 metres | 17.2 |
| León | Latacunga | - 2,801 | 14.2 |
| Loya | Loya | 2,200 | 18 |
| Los Rios | Babahoya | - - |  |
| Pichincha | Quito (Capital) | - 2,850 metres | 13.2 C. |
| Tungurahua | Ambato | - 2,608 | 15.3 |
| Manabi | Portoviego | - - | - |

COLON ARCHIPELAGO (GALAPAGOS ISLANDS)
This group of islands, situated several hundred miles from the coast of Ecuador, obtain importance from
their strategic position off the Bay of Panama and the Pacific entrance to the famous inter-oceanic canal.

The archipelago extends over a wide area and is volcanic in origin. The thirteen principal islands, all of which are essentially tropical, may however be divided into a northern and southern group.

Northern Group.-Pinta (Abingdon), which has an area of 12,500 acres, and comprises the peak, or cone, of a submarine mountain. It is unpopulated. Marchena (Bindloe), which rises about 250 metres above sea level has an area of 24,000 acres, but no population. Genovesa (Tower), a cone rising only sixty-five metres above sea level with an area of 4,250 acres and unpopulated.

Southern Group.-Isabela (Albemarle), the principal island of the whole archipelago, which has an area of 940,000 acres, is composed of the craters of three extinct volcanoes rises to a height of over a thousand metres above sea-level, it possesses several plantations and a population of about 200. Fernandina (Narborough), the crater of a more or less active volcano, arid and unpopulated, with an area of 163,750 acres. San Salvador (James), a fertile little island, at present unpopulated, with an area of 128,750 acres. Radiba (Jervis), an unimportant islet. Pinzon (Duncan), uninhabited and of no value. Santa Cruz, a fertile but unexploited island of 231,750 acres. Santa $F e$ (Barrington), uninhabitated and of no value. San Cristobal (Chatham), a fertile island with a lake on a mountain top, and an area of 98,400 acres. Sugar and coffee are largely cultivated, and there is a population of about 500. Santa Maria, a fertile island abounding with tropical fruit, almost unexploited, with an area of

33,750 acres. Espanola (Hood), a fertile but unexploited island of 25,750 acres.
In bygone times these islands were the resort of pirates and were visited by many famous navigators. In 1832 the Ecuadorian Government took possession of them, and has since established a form of government, agricultural colonies, a police force and a postal service.

## PROVINCE ORIENTE

About the vast expanse of territory stretching inland from the eastern slopes of the Ecuadorian Andes for over 400 miles down the valley of the Marañon little can be said for it is an almost unexplored region of Equatorial forests intersected by a considerable number of rivers both large and small. On the north it borders Colombia for a distance of 420 miles, on the south Peru for 480 miles, and on the east its frontier with Brazil extends for 240 miles. The ownership of parts of this territory is disputed by the adjoining States.

For administrative purposes it is divided into five cantons, which are : Napo, Curaray, Pastaza, Santiago, and Zumorra. The headquarters of the administration of this region are at Macas, in the canton of Santiago, but the capital, if such a term is possible, is Archidona.

The products of this tropical region of great forests consist principally of vanilla, gums, resin, fruit, cocoa, coffee and tobacco. It is populated by various Indian tribes, some of whom are quite uncivilized. It forms part of the great dead heart of Equatorial South America, which will, in no far distant future, awake from its primordial sleep.

## RAILWAYS

The principal railway line in Ecuador runs from the seaport of Guayaquil to Quito, the capital of the Republic, a total distance of about 300 miles. This line crosses several of the more developed and populated provinces of the State. The journey from the Pacific coast to the capital on the Andean slopes is now accomplished in two days, whereas it previously occupied at least fifteen days by boat and mule-back.

Another railway line to connect Quito with the Pacific coast has been under construction for some years. This line runs from Caraquiz Bay, on the coast of the Province of Manabi, via Chone, to Quito. The total length is 200 miles, and the region it traverses is a rich agricultural one.

A line is under construction which will connect the important town of Cuenca, capital of the Province of Azuay, with the neighbouring Province of Cañar, and a short line ( 20 miles) connects the town of Machala, capital of the Province of del Oro, with Pasaji, and the Pacific coast town of Puerto Bolivar, traversing a rich mineral zone.

The total length of railway lines in operation is about 450 miles. There are also several coastal and river steamboat services.

## THE CAPITAL

Quito, the capital of the Republic, is situated in the Province of Pichincha, at a distance, as the crow flies, of about 150 miles from the Pacific coast. It is a more
or less healthy city of about 80,000 inhabitants, situated on the Andean slopes at an elevation of 2,850 metres. The average temperature is about $13 \cdot 2 \mathrm{C}$. It possesses some well-kept thoroughfares, fine old churches, modern (adobe) public buildings and conveniences, including electric light. It is a pleasing city compared with many South American towns, and parts of the surrounding country are almost park-like, with the tall trees and foliage of a temperate climate.

There are several fine plazas and thoroughfares, among which must be mentioned the Plaza Independencia, Plaza de Sucre, the Alameda, and the Municipal Park. Among the more notable buildings are, the Palace of the Government, the Palace of Justice, the Palace of the Archbishop (nearly all large public buildings are palaces in South America), the National Exposition, the Church of Jesus and St. Francis, the Church of La Merced, and the University. The principal theatres are the "Sucre" and the Hippodrome. There is also a Plaza de Toros. One of the best hotels is the Royal. There are three long thoroughfares bordered by the best shops and stores, and the general appearance of the city is improved by the presence of large sheets of placid water.

## CHIEF TOWNS

The next most important town to Quito, the capital, is Guayaquil, the principal seaport of the Republic. The population of this Canton of the Province of Guayas is 140,000 . About this seaport little need be said beyond the fact that it was founded as early as 1537, and now possesses all the conveniences of a modern and fairly
up-to-date South American tropical seaport, including tramways, telephones, electric light, hospitals, churches of several denominations, museums, libraries, firebrigades, newspapers, fairly good hotels, clubs, parks, well-laid-out squares and parks, theatres, cinemas, and docks. There is a frequent service of trains to the capital and to several of the principal inland towns, and regular steamboat communication with all the Pacific ports to the north, as far as Panama, and south to Callao and Valparaiso. The cable service, by the Central and South American Telegraph Company, connects with the outside world via Galveston (U.S.A.).

The principal towns of the Republic, other than those already mentioned, with the population of the cantons, are as follows:-


There are several other cantons with a population ranging from twelve to twenty thousand, but it should,
in all cases, be remembered that the bulk of the population is either native or half-breed, and that the principal foreign residents in the country reside either in Guayaquil or Quito.

## NATURAL PRODUCTS AND COMMERCE

The diversity of climate in Ecuador, produced by the difference in altitude of the various zones, enables many kinds of fruit, vegetables, and other crops to be cultivated with success, and the exuberant vegetation is as varied as it is abundant. Almost anything that will grow in tropical, semi-tropical, or even temperate climates, can be produced in Ecuador within 200 miles of the coast. The great staples of the country are cocoa, panama hats, ivory nuts, coffee, hides, gold, rubber, toquilla straw (for hats), bananas, and tropical fruit.

Only a fraction of the territory of this naturally rich State is as yet exploited, and both cotton and tobacco should soon be added to the list of staple products.

The foreign commerce of Ecuador has in the past been conducted very largely with Great Britain, the United States, Germany, France, Italy, Spain, and Belgium, in order of value, but during the war-period the trade with Germany and Belgium ceased, and that with Great Britain, France, and Italy, severely declined. The position in 1916-17 was as follows (approx. figures) :

|  |  | Imports. | Exports. |
| :--- | ---: | ---: | ---: |
| United States | - | $£ 1,100,000$ | $£ 1,800,000$ |
| United Kingdom | - | 500,000 | 720,000 |
| France | - | - | 78,500 |
| Spain | - | - | 99,100 |
| Italy - | - | 52,800 | 145,000 |
|  |  |  | 94,700 |

The total foreign trade of Ecuador during the same period was, imports $=£ 2,008,000$, and exports $=$ £3,700,000.

The principal articles imported in order of value are as follows:-textiles, food supplies, hardware, readymade clothing, drugs and medicines, machinery, boots and shoes, paper, oils, cordage, perfumes and soaps, wines, spirits, liquors, vegetables, candles, motors and carriages, hats, jewellery, glassware and crockery, arms and ammunition, books, cement, musical instruments, paints and varnish, silk fabrics, leather, matches, and live animals.

The principal exports by value are : cocoa, panama hats, ivory nuts, coffee, hides, gold, rubber, bananas, fruit, and straw for hats.

Currency, Weights and Measures.-Ecuador has for its principal coin the gold condor, equalling in value the pound sterling, but these coins are seldom seen in actual circulation, and there is the gold sucre of 100 centavos, which is equivalent to about two English shillings. There is also a large but decreasing amount of paper money.

The metric system of weights and measures is in general use, but there are also several old Spanish measures still in vogue, the principal of which are: the Quintal $=101.4 \mathrm{lbs}$., the libra $=1,014 \mathrm{lbs}$., and the vara $=33$ inches.

Postal Service and Telegraphs.--Ecuador was a signatory to the Postal Union, and there is a letter and parcel post (limit of value about £10). The telegraphic net comprises about 4,000 kilometres, divided into four sections, serving the north, the centre, the south, and the coast of Ecuador, with 155 offices.


GOVERNMENT PALACE, QUITO, E(CAD)P。


PASEO "JUAN MONTALVO," GUAYAQUIL, ECUADOR.


COCOA PLANTATION, ECUADOR.


CARÁQUEZ BAY, ECUADOR.

Industries.-Ecuador is at present in the early stages of industrial development, and under a generous national decree offers considerable concessions for the establishment of new industries which would utilize the raw material of the country. The principal manufactures at present are: sugar (11 refineries) aguardiente, panama hats, cigars and cigarettes, phosphorus, and. printing.

## MINING

The absence of an adequate system of transport has been mainly responsible for retarding the natural development of the mining industry; and the entire absence of reliable records of systematic prospecting makes it impossible to give here much useful information concerning the future of this industry in Ecuador. The rich mineral regions of the Peruvian and Bolivian Andes lying to the south, and the mineral resources of Colombia to the north would seem to indicate much latent wealth beneath the surface of this somewhat backward little State wedged between the three great mineral producing countries of South America.

It is known that nearly all the rivers in the northern Province of Esmeraldas are auriferous, and that in the Provinces of Cañar, Chimborazo, Pichincha, Leon, Manabi, Azuay, and Oro, gold, silver, copper, coal, and other minerals exist in considerable quantities over wide areas of territory, but little has so far been done to exploit these deposits with modern machinery, owing principally to the lack of mechanical transport, foreign skill and capital. With the extension of the railway
system, however, it would not be surprising if an era of considerable mining prosperity commenced.
There are mineral springs in many parts of the country, principally, however, in the Provinces of Pichincha and Leon. Petroleum has been discovered during recent years, and a United States company is engaged in mining operations in the Province of Cañar.

The mining laws were codified in 1907 and are stringent but generous. This industry is, however, at present in its infancy in the Republic of Ecuador.

## XX

## FOREIGN COMMERCE WITH SOUTH AMERICA

It would be scarcely possible at the present time of commercial convalescence to enlarge on the importance of South America as a field for the overseas trade of Europe, now so vitally necessary to repair the ravages of an unprecedented and almost world-wide war. It is not so much the profit earned by such trade expansion that the European nations require as the exchange of food and raw materials in return for the manufactured article to equalize the complicated systems of exchange between the civilized countries of the world. The position is little better than that of the New World feeding the old world in return for the products of its industry. The financial position is of secondary importance because it is neither cause nor effect, but simply a condition dependent on the export trade of Europe. In simpler vein, if the value of a country's exports to a neighbouring State does not equal in total value, combined with freight charges, the cost of the imports from that State, then gold or securities must be sent to cover the additional indebtedness, and to export gold in large quantities is a financial policy of despair.

The possession of a proportionately big import trade into the South American States, combined with the ships
to carry such trade will, therefore, play a big part in the rapid recovery of a war-worn nation's impaired resources.

It is, perhaps, not generally realised what the overseas trade of the $7 \frac{3}{4}$ million square miles and $55 \frac{1}{2}$ million people forming modern South America really means. As an indication of its effect on the markets and industry of the world it will be sufficient to say that the total overseas commerce of the South American States (exclusive of the Guianas) amounts in average annual value to $437,000,000$ sterling, of which the value of the foreign imports into these countries averages $196,500,000$ sterling per annum. And there are now only four serious competitors for this colossal trade; viz. the United States, the British Empire, France and Belgium, Italy and Spain; the four latter countries being coupled together because individually their trade with South America is not sufficient to place them in the front rank of competitors.

Previous to the great war the nations of Europe supplied $84 \frac{1}{2}$ per cent. of the $196 \frac{1}{2}$ millions worth of South American imports. This position, was, however, altered in favour of the United States during the conflict in Europe, and five years' absence of serious competition enabled her to obtain a firm hold on the commerce of these countries. Now, when keen but friendly competition is promised she has the aid of the Panama Canal and increased shipping resources. These advantages, however, only compensate for the absence of other aids to commerce possessed by Great Britain. The principal of which is, that by far the largest proportion of the capital whereby these countries reached their present state of development came from the United Kingdom, and, as a corollary, British brains constructed
and controlled nearly 85 per cent. of the railroads, harbours, and public works, 45 per cent. of the foreign industrial and agricultural activity, and 50 per cent. of the shipping, commercial, and financial activity.
It is true that the war has greatly changed this position, but there is still a preponderating British commercial influence in South America, which, if energetically aided and fostered by the Imperial Government and people, will resume its old position of supremacy, to the incalculable advantage of British trade.

In 1914 the British capital invested in South America was estimated at over 800 millions sterling, and 62 per cent. of the shipping trade was carried by the Red Ensign. There were certain British firms predominant in their respective spheres in these countries, and, for the most part these great pioneer and long established organizations still remain, though perhaps somewhat weakened by the far-flung havoc of modern war. As an indication of these giant undertakings upon which the revival of British foreign trade in this field will in a certain measure depend, it is only necessary to mention The Royal Mail Steam Packet Co., The Peruvian Corporation, Liebigs, the Nitrate Companies, the great Anglo-South American Banks, and the Railway companies registered in London. A careful search in the Stock Exchange lists will reveal their number and financial power.

Great Britain is not alone, however, in this important respect; there are many United States commercial corporations predominant in their respective spheres. For examples of which we have only to look to such undertakings as the United Fruit Company of America, the Singer Sewing Machine Co., several Railway
companies, Steamship lines, typewriter companies, film companies and fire-arm manufacturers.

France too has big commercial and banking interests, and Germany has her firms and her settlers. Spain has the ties of language, literature and old associations, and Italy the great bond of labour.

All these countries must therefore rightly participate very largely in South American overseas commerce.

There is unlimited scope for all.-During the war there has been an annual loss of 90 millions sterling in the foreign trade of Latin America. The markets of these countries have been overflowing with produce which could not be shipped abroad, and their national finances have suffered severely because of the dependence placed on indirect taxation (i.e. import duties). The 58 millions of people have gone short of much that they needed because of the absence of manufacturing industries at home and the impossibility of getting all they required from abroad. Consequently they are now ready to absorb vast quantities of foreign merchandise in exchange for their raw materials.

For a like period there has been an almost complete cessation of the hitherto phenomenal development of these countries, due to the stoppage of the influx of foreign capital, machinery, and immigration. Hence there are now openings for the foreign capitalist which would otherwise have been filled, and the governments of these States realizing the necessity for re-commencing the exploitation of the vast national resources, are inclined to be more liberal in their dealings with would-be concessionaires.

It is, therefore, not so much a question of the absence of opportunities for foreign trade that Great Britain
and other countries need apprehend as the more serious struggle to be the first in the South American field, ready, with a superabundance of merchandise, a perfect trade, financial and credit organization, to supply the demand on a basis of mutual help.

The nation, or nations, which can meet the call will be given a big push towards the universal goal of financial recovery from war's effect, and, incidentally will attain to a limited trade supremacy in South America.

There are, however, complicating factors in future trade with South America, which may be summed up under six headings as follows:-(1) credit extensions; (2) the acceptance of raw material in return for manufactured goods; (3) the provision of shipping; (4) the establishment of branches and banks; (5) the maintenance of propaganda, advertising, and efficient representatives ; and (6) the study of the exact requirements of these countries by the foreign financiers, manufacturers, merchants and packers themselves. To leave this sixth requirement to inexperienced clerks is to ask for failure in the South American field.

## COMMERCIAL REPRESENTATIVES

It will have been observed from previous pages that travellers in many South American countries are called upon to pay, what may appear from a European standpoint, unduly high fees or taxes before they can commence business. These charges are, however, usually added to the cost of the goods they sell, and are, therefore, in nearly all cases, paid for by the wholesale buyers and ultimately by the retail purchasers, and are really
only a form of indirect taxation for local revenue purposes. It should also be observed that when representatives of foreign firms visit these countries and their cities and towns solely for the purpose of appointing and supplying samples, catalogues, and even goods (ordinary duty paid) to resident agents, and not for the purpose of direct trade, the payment of the commercial traveller's tax is very seldom demanded. It being also decidedly preferable for foreign firms attempting to do business in these countries to have resident agents in each centre, who know the financial standing of the local business men, and upon whom the special representative of the foreign firm can call for wholesale orders, the imposition of this tax seldom affects the importer or foreign manufacturer.

It is perhaps advisable to say something here of the type of foreign travellers or representatives most suitable for the conduct of operations in the South American countries. This may, to some even clever business men, sound of far less importance than it really is, because they have become accustomed to look upon experienced commercial travellers as all much alike and to be measured by the new accounts they open in a given time; also because in Great Britain and the United States a well advertised and genuine article will mostly sell itself, needing only a traveller with sufficient conversational ability, push and bluff. It may come as a surprise to many to learn that South and Central America is the grave-yard for the so-called " business-like," pushing, bluffing and loquacious commercial. These countries still maintain much of the old politeness, love of amusement, and almost disdain of trade. It is the custom to make friends first, then
to accompany them to some form of amusement or relaxation, and finally to remember the "unpleasant mode whereby they live" and suggest the business which has hitherto been tabooed in conversation. Possibly an order worth hundreds of pounds will then be settled in a few minutes after days or even a week of friendly meeting.

In many parts of the sub-continent it is as well that the traveller should not describe himself exactly as he would do in less sensitive countries, but should simply be " interested in such and such a firm " and be as capable of mental repose and physical ease at the reception of a cabinet minister as in the hut of a peon. And this ability is not perhaps quite so easy of accomplishment to certain types of even successful commercial men as many of them are sometimes inclined to suppose, but it is essential in South America for the representative of an important firm.

It is difficult to lay too much stress on this point, because it makes the type of man who is frequently highly successful in other countries little short of a failure in South America. It is quite as important as a knowledge of Spanish, and more important to an employer than the salary paid for the services of such an Admirable Crichton of commerce. It would appear to be the reason why a certain type of traveller from the United States, also, does not meet with the success that is deserved by the energy displayed.

It is, however, equally as important to avoid the supercilious or arrogant types. The former will frequently display an affected dislike for anything not of his native land, or not in accord with his narrow views of life or the fitness of things, while the latter will
alienate the sympathies of an innately polite race. It the appointment is a Government one, such as that of a Consul, these points assume the greater importance of the position.

## PERIOD OF CREDIT

It is somewhat difficult to write of what must necessarily be determined by a variety of changing circumstances. There are, however, one or two factors in relation to credit which ought, perhaps, to find a place here.

The South American countries may economically be described as agricultural, pastoral and mining communities, and as is the case with all such states, demand long credit from foreign firms endeavouring to carry on an import trade with them. The reason, briefly described, is that the small colonist, whether he be agriculturalist, pastoralist or miner, seldom has sufficient capital to maintain himself and family and carry on his industry without obtaining credit from the local store keeper, who, to use an American mining expression " grub-stakes" him until he reaps his harvest, sells his flocks and herds, or strikes "pay-dirt." This would be a purely personal transaction of no economic im. portance if the local trader was, himself, a capitalist in a small way, but such is seldom the case; he looks to the wholesale house with whom he deals to extend to him the credit that he passes on to his customer, and without doing which he could not transact business. The wholesale house, having all its available capital locked up in this way, and naturally seeking to avoid
setting a limit to the business it is able to transact with its retail buyers, turns to the manufacturers or importers, and, by nicely balancing one against the other, obtains the capital required to continue by obtaining credit upon each wholesale order. The importer able to extend the longest credit, or in fact lend the use of capital, to those wholesale houses who take his goods is therefore better able to increase his business, and he, in turn, looks to the manufacturer for credit to enable him to sell increasing quantities of his wares. In South America, to this must be added, the length of time occupied by goods in transit from the coast to the interior and in remitting cash or produce from the interior to the coast.

These and other considerations, such as the international commercial rivalry, make it imperative for foreign firms desiring to do business in this lucrative and growing market to extend very considerable credit to its wholesale buyers. The usual period is sixty to ninety days, but it would strengthen the hand of any representative in South America who was able to grant, to local firms of good standing, at least ninety to one hundred and twenty days and preferably one year. This could be made more easy by the establishment of more British branch banks in South America, or some form of insurance against bad debts, which are, however, not frequent.

## IMPORT DUTIES

There are manufacturers even to-day who hesitate to open up trade with the South American countries because of the high tariffs. In the first place the duties
imposed by many of the South American States are for revenue purposes only, and the amount of such duties is simply added to the price of the goods imported and is eventually paid by the consumer, who recognizes it as a form of indirect taxation, often in lieu of an income tax. It is a less noticeable form of obtaining the necessary national revenue. In very few cases, so far as South America is concerned, are duties imposed on foreign imports in order to protect home industries, or as a means of differentiating between the goods from one foreign country and another.
Furthermore, sales are very frequently affected by foreign firms with prices quoted ex-import duty, which is paid by the wholesale purchaser resident in the country, who can be relied upon to get from the officials the lowest possible assessment.

When an article is on the free-import list of any South American State it is a sure sign that it is badly needed, probably for some public purpose.

## PACKING

Many so-called ports in South America are nothing more than bays, more or less sheltered, at which coasting steamers call and unload into lighters. Anyone who has seen the packages of merchandise lowered by derrick or crane from the rolling ship to the still more unstable lighter, and then pass through the line of drenching surf to the shore, will realize that packing for South American transport is a speciality. If there is also a journey of some hundreds of miles inland on mule-back, or even in railway trucks or on coasting steamers, it
becomes an art, and if all this movement has to take place in the tropical zone of the north, subject to great heat, torrential downpours, damp mists, and the gentle hands of native coolies, it develops into a science, needing previous education in the school of practical experience before it can be undertaken even partially successfully. Surely the war has provided many nations with expert packers for overland transport.

All directions should be printed on bales and cases in Spanish and in English for all the South American countries except Brazil, where Portuguese is spoken.

Few things are more exasperating to the up-country trader than to have valuable supplies, for which he has probably been waiting six or nine months, and which (in the tropical regions) can only be transported during certain seasons, rendered utterly useless by faulty packing. Especially as, whatever condition they arrive in, he will probably have to pay their cost, the import duties, and the heavy transport charges, which often amount to 200 per cent. more than the value of the goods.

## ADVERTISING

In South America advertising is both more important and more costly than in either Europe or the United States. The reason for the former is that travellers cannot cover the country or district nearly so closely as is possible in more developed and more populated states, and, therefore, when a name or trade-markwhich must be registered in each country-becomes known and is asked for, local traders order direct from the wholesale houses, and, if their customers
are satisfied, they continue to buy the same article for a long period without seeing a traveller. Often these small retailers carry on their business hundreds of miles from a town, and do all their buying from advertisements and catalogues. It is, in fact, no uncommon thing for them to advertise soliciting catalogues in Spanish from foreign firms, as a reference to local guides or directories will fully demonstrate.

The reason for the high cost of all forms of advertising is principally due to the wages paid to compositors, the vast areas over which the newspapers circulate, and to the cosmopolitan population of many of these countries, which frequently make it necessary to reproduce the same advertisement in journals printed in different languages for the different colonies.

Finally, it should be pointed out that the hitherto prevailing custom of sending the commercially most competent consuls and private representatives only to the countries, districts, and towns, where the trade with the nation they represent is already firmly established, is an error of commercial policy. Where the international competition is keenest, or where the trade is young and weak, there should the most competent consul, commercial counsellor, or private representative, take up his temporary stand; in the same way as a General uses his finest troops in battle.

## APPENDIX

## REGULATIONS AND TAXES AFFECTING FOREIGN COMMERCIAL TRAVELLERS IN SOUTH AMERICA

Although some information concerning foreign commercial travellers in South America has already been given in the sections devoted to each separate State, its importance in view of the increasing commercial relations between these rising agricultural, pastoral and mining nations of the New World and the more populous manufacturing countries of Europe and the United States, has seemed to warrant the giving here of an epitomized account of the many regulations in force vitally affecting the conduct of commercial operations in the nine Latin-American countries forming the subject of this book.

No attempt at literary style will be made in conveying this information in the briefest possible manner, and the remarks relating to the avoidance of the payment of commercial travellers' taxes given in previous pages should be read in conjunction with the following. Some of the latest information here contained is derived from detailed particulars readily supplied by the Tariff Section of the (British) Department of Overseas Trade.

Argentina-All foreign commercial travellers must obtain one or more licences according to their respective zones of operation. Under the Federal Law of 1917 the cost of a commercial traveller's permit for the Capital (Buenos Aires) and the National Territories (see general description) varies from $£ 43 \mathrm{l} 3 \mathrm{~s}$. to £436 10s., in proportion for categories found to be commercially superior. ${ }^{1}$ This tax applies to permits granted by the Federal Authorities only, and for the areas under their direct fiscal

[^10]administration. It is exclusive of the licence fees charged by the Provincial and Municipal Governments in the remaining Provinces of the Republic.

The following are the fees demanded from foreign commercial travellers in the principal Provinces of Argentina, other than those collected by the Federal Authorities in Buenos Aires and the National Territories.

Jujuy-A licence costing £8 15s. for each kind of merchandise sold.
Salta-An annual tariff, as follows:-Tissues $£ 87$, haberdashery $£ 52$, groceries $£ 35$, hardware $£ 48$, china and glass $£ 22$, boots and shoes $£ 35$, hats $£ 17$ 10s., men's clothing $£ 70$, women's clothing $£ 17$ 10s., sugar $£ 87$, wines $£ 17 \mathrm{10}$., drugs $£ 26$, perfumery $£ 26$. These licences, which must be taken out before commencingbusiness, can, however, be obtained for a period of six months.
Tucumán-A licence costing $£ 52$ per annum, or $£ 26$ after June 30th. Transferable between travellers of the same firm.
Córdoba-A licence costing $£ 35$ per annum or $£ 26$ after June 30th each year. Transferable between travellers of the same firm.
Santa Fé-A licence costing $\mathfrak{£ 3 5}$ per annum.
Entre Ríos-A licence costing $£ 52$ per annum, or $£ 26$ after June 30th. Not transferable.
San Juan-Licence costing $£ 35$ per annum. Not transferable and not issued for shorter period.
Mendoza-Licences: annual £61. For four months $£ 52$, except September to December £35. Not transferable.
Corrientes-Licences: $£ 52$ when selling to business houses only, and $£ 87$ when selling to private people. Not transferable.
Santiago del Estero-Licences, £26 per annum, terminating on December 31st irrespective of date of application.
Rioja-Licence, $£ 1710$ s. per annum, or half this amount after July 8th. Tailors goods only $£ 13$.
Gran Chaco-Licence varying from $\mathfrak{£ 4} 7 \mathrm{~s}$. to $£ 61$ (higher figure seldom demanded).

La Pampa-Licence varying from $£ 815 \mathrm{~s}$. to $£ 61$. If applied for after middle of year proportionately reduced.
Catamarca-Licence costing $£ 26$ per annum, except for salesmen of a single article in mercers, grocers or shoe trade, then only £17. 10s. Whole year and not transferable.
Misiones-Licence costing £8 15s. per annum.
Rio Negro-Licence costing $£ 8$ 15s. per annum.
San Luis-Licence costing $£ 35$ per annum. Issued for shorter periods.
Chubut-Licence varying from $£ 43 \mathrm{l} 3 \mathrm{~s} .6 \mathrm{~d}$. to $£ 47 \mathrm{~s} .6 \mathrm{~d}$. per annum.
Neuquen-No licence required.
National Territories-(Doubtful in view of tax charged by Federal Authorities).
Samples, if of no value, are admitted duty free. If, however, they possess a certain sale value the ordinary duty must be paid, but is refunded on the re-export of the samples within six months.

Brazil-The Federal Government of Brazil does not require foreign commercial travellers to take out any special licence, but this is not the case with the States and Municipal Administrations, each of which has some form of special taxation.

Rio de Janeiro-(City and State) No licence required unless samples or goods carried are sold.
São Paulo-There is no licence required by the State administration, but the Municipality of São Paulo charges $£ 66$ 10s. and that of Santos $£ 335$ s.
Bahia-The State of Bahia charges $£ 613 \mathrm{~s} .4 \mathrm{~d}$. for an annual licence, which must be renewed if the traveller leaves the State and subsequently returns.
Minas Geraes-This State requires a licence costing $£ 313 \mathrm{~s} .4 \mathrm{~d}$. There is in addition certain municipal charges if the traveller does business with private individuals.
Maranhão-A State licence costing $£ 16$ 13s. 4d., and for the capital, a municipal tax of $£ 6 \mathrm{l} 3 \mathrm{~s} .4 \mathrm{~d}$.
Pará-Although a licence is actually required by law ( $£ 20$ ) is it seldom demanded by the State Administration.

The Municipality of Pará City, or Belem, does, however, collect a tax of $£ 266 \mathrm{~s}$. per visit.
Pernambuco-This State requires a licence, costing $£ 40$, from all who do not possess a resident place of business (pedlars), but this is usually overcome by travellers making use of the premises of a resident. The Municipality of Fortaliza charges $£ 3$ 10s.
Rio Grande do Sul-The State licence costs $£ 137 \mathrm{~s}$. The Municipalities of Porto Alegre £6 13s. 4d., Pelotas $£ 13$ 6s. 8d., Rio Grande no licence, Barge, £54, Uruguayana $£ 20$, São Borga $£ 4$, and São Gabria $£ 13$ 6s. 8 d.
In addition to these licences a power of Attorney, registered before a local Notary Public, from the foreign firm to the traveller is needed if the latter receives payment for sales. Samples of little or no value are admitted free of duty, but samples of value are dutiable, and there is no refund. For this reason samples are mostly sold in the country.
Chile-Under the law of 1916, Chile departed from her previous custom of charging no duties or taxes in any part of the country on the operations of commercial travellers. Now a tax of about $£ 28$ is required for each department of the country in which business is carried on. This tax is, however, not payable if the foreign firm has a selling agency in Chile, and is usually overcome by the traveller arranging to attach his firm's nameplate to an established place of business and paying the nominal trading licence.
Colombia-In this country commercial travellers must pay taxes according to the class of commercial operations in which they are engaged, and local dues according to the place or places in which business is carried on. The following are the local charges:-

Bogota-(the capital) no charges.
Cartagena-(Municipality) Permanent Agents $£ 12$ per annum.
Commercial travellers $£ 1$ for the period during which they remain.
Manizales-(Municipality) For exhibiting samples $£ 2$ per month.

Medellin-Licence costs $£ 8$ for four months.
Santa Marta-(District) Licence costs $£ 1$ per month.
Cali-Licence costs $£ 6$ for four months and $£ 1$ per month afterwards.
Barranquilla (Municipality)-No local taxes.
Honda-(District) No taxes.
Tumaco-(District) No taxes.
Condinamarca-Tax of $£ 5$ per month for each business house represented.
Samples of no value admitted free, but those of value dutiable on refund. Invoices of samples must be certified by the Colombian Consuls in the country of export. No special railway facilities.

Ecuador-In this country commercial travellers are only called upon to pay a tax of $£ 10$ on entering the Republic. A receipt is given by the Custom House which must be produced for endorsement at each port called at if the traveller moves by sea. A pedlar's licence is required if goods carried are actually sold. Samples of all kinds admitted free of duty if a guarantee as to re-export is given by a responsible residential firm.

Paraguay-British commercial travellers must obtain a licence to trade in each municipality visited. The fees vary according to the importance of the firms represented, which is decided by an advisory board of merchants. The fees of the different classes payable in the five most important towns of the Republic, (Asunción, Villa Rica, Encarnación, Concepción and Villa del Pilar) are as follows.

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| 5th | " | 16 | 6 | 6 |  |  | , |

In other towns and districts the charges for licences are about one-third of the above amounts. Travellers or principals of firms having resident agents can carry on their business without any of these licences. Samples of no value are admitted free, and those of value are dutiable on refund. No special facilities are accorded on the railways.

Peru-There are no special taxes in this Republic and licences are not required. One sample of each kind of article is admitted free of duty.

Uruguay-A licence costing about $£ 21$ annually must be taken out by all foreign commercial travellers visiting this country. These licences expire on the 31st December, but the full amount is charged regardless of the date of application. A written application, bearing a 50 centavos stamp, must first be made to the Chief of Police of Montevideo, who will then grant a certificate, which must be presented at the office of the Director-General of Indirect Taxes, by whom the licence, itself, is issued. Samples are not subject to Customs duty but a bond is required. No special facilities are granted on the Railways.

Venezuela-There are no special licences or taxes required by, or imposed on, commercial travellers in this country, unless they sell the samples or goods they carry. It should, however, be noted that all persons entering Venezuela must produce a certificate of vaccination, legalised by a Venezuelan Consul. Samples of all kinds are admitted free of duty under Bond. Trunks containing samples must pay duty without refund, but wooden boxes are duty free.

Bolivia-There is no national tax or licence required in Bolivia, but each town levies its own specific charge. In La Paz the tax amounts to $£ 1210$ s. for any period up to one year. In Sucre it varies according to the standing of the firm represented and the orders likely to be obtained. 1st class $=£ 15$, 2nd class
 for any period up to one year. Oruro-The tax varies from $£ 2$ to $£ 15$ in the same way. At Cochabamba the charge is $£ 10$ for each visit, and at Santa Cruz, it varies from $£ 50$ to $£ 20$.

Note: Owing to variations in the rate of exchange the figures given throughout this appendix are liable to changes.

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[^0]:    ${ }^{1}$ A hectare is equal to about $2 \frac{1}{2}$ acres.

[^1]:    ${ }^{1}$ The language and customs of South American countries make them more suitable for emigrants from the south of Europe than from Great Britain.

[^2]:    ${ }^{1}$ The Provinces through which these lines run, and the cities and towns which they connect, may be seen on the map.

[^3]:    ${ }^{1}$ The Germans form the exception to this rule, often retaining for several generations the language and customs of their fatherland.

[^4]:    ${ }^{1}$ Brazil is most suitable for immigrants from Italy, Spain, and Portugal.

[^5]:    ${ }^{1}$ Pre-war rates. New rates not yet settled.

[^6]:    1 The outbreak of the Great War and the entry of the United States into the conflict has delayed completion of many of these lines. The above extract is from a speech delivered in 1910.

[^7]:    ${ }^{1}$ The low rate of wages makes it unadvisable for British labourers to emigrate to South America.

[^8]:    ${ }^{1}$ The Spanish spoken in the two Americas differs slightly from the original language of Spain.

[^9]:    ${ }^{1}$ This only refers to land actually the property of the State.

[^10]:    ${ }^{1}$ The wording of the law is at this point very vague.

